



# **P R O J E C T   M A N U A L**

**TENNIS COURTS RIVERS EDGE PARK- NORTH  
ROANOKE, VIRGINIA**

**Invitation to Bid No. 16-02-05A**

**Issue Date: January 15, 2016  
Opening Date: February 5, 2016**

**Issued By:**

**Purchasing Division  
Monica Cole, Senior Buyer  
215 Church Avenue, S.W., Room 202  
Roanoke, Virginia 24011  
(540) 853-2871  
Fax (540) 853-1513**

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## **INVITATION TO BID**

### **CITY OF ROANOKE, VIRGINIA**

Sealed Bids for:

#### **TENNIS COURTS RIVERS EDGE PARK- NORTH**

#### **ROANOKE, VIRGINIA**

**This project is generally described as construction of a new tennis facility in Rivers Edge Park-North in the City of Roanoke, Virginia. The Project will include, but is not limited to, clearing, grading, concrete, construction, asphalt paving, fencing, and bioretention pond construction and associated work. The City may elect, at its sole discretion, to proceed with Alternate No. 1, pavement edging with curbing, as indicated in the attached plans.**

#### **INVITATION TO BID NO. 16-02-05A**

Sealed bids will be received by the City of Roanoke by Monica Cole, Senior Buyer, Purchasing Division, Noel C. Taylor Municipal Building, 215 Church Avenue, S.W., Room 202, Roanoke, Virginia 24011, at or before 2:00 p.m., local time, on February 5, 2016, at which time all bids received will be publicly opened and read. Bids received after 2:00 p.m. will not be accepted or considered. The time of receipt shall be determined by the time clock stamp in the Purchasing Office, or if it is not working, such time shall be determined by the Purchasing official who is to open the bids. This project is generally described as set forth above.

The Instructions to Bidders, plans, specifications, the Contract, and other Contract Documents are incorporated herein by reference. Copies of these items may be examined during business hours in the Purchasing Division, Noel C. Taylor Municipal Building, 215 Church Avenue, S.W., Room 202, Roanoke, Virginia 24011 (Phone: 540-853-2871). Bidders are cautioned to review bid documents thoroughly before submitting a bid. Copies of the documents may be downloaded from the City Vendor Self Service website at <https://VSS.roanoke.gov>. The City will not be responsible for documents obtained from any other source.

All Contract Documents prepared and/or furnished by the City shall be the exclusive property of the City of Roanoke, Virginia, and shall not be used for any other project(s).

Each bidder is solely responsible for ensuring that such bidder has the current complete version of the Bid Documents prepared for the project, including any addenda issued by the City, before submitting a bid.

**A non-mandatory pre-bid conference will be conducted on January 26, 2016, at 11:00 a.m., local time, at 215 Church Avenue, SW, Room 350, Roanoke, Virginia 24011, in the Engineering Conference Room. It is strongly recommended that Bidders attend this conference.**

Bidders and all subcontractors are required to comply with all applicable city, state, and federal laws, ordinances, and regulations; and are required to be properly licensed under Sections 54.1-1100, et seq., Code of Virginia (1950), as amended. Bidders shall deposit with their bid a Bid Security executed in the amount and form stipulated in the Instructions to Bidders.

The City expressly reserves the right to cancel this ITB and/or reject any or all bids, to waive any informality or irregularity in the bids received, and to accept a bid from the lowest responsive and responsible bidder which is deemed to be in the best interest of the City.

If an award of a contract is made, notice of the award, or the announcement of the decision to award, will be made by posting a notice of such award or announcement in the foyer area of the second floor of the Noel C. Taylor Municipal Building at 215 Church Avenue, S.W., Roanoke, Virginia 24011.

To determine the lowest responsive and responsible bidder who may be awarded a Contract for the Work, the criteria set forth in or requested pursuant to the Instructions to Bidders or in the Bid Documents may be considered.

By submitting a bid, each bidder agrees that this is a solicitation of bids and each bidder agrees to be solely responsible for the cost or expense of its bid and the City shall have no responsibility for such costs or expenses.

Direct contact with any City employee, City consultant/architect, without the expressed permission of the Purchasing Manager, or her designated representative, on the subject of this solicitation is strictly forbidden. Violation of this instruction may result in disqualification of bid.

If a certain brand, make, item or manufacturer is specifically and exclusively required or called for in the plans, specifications, or other contract documents, then that brand, make, item, or manufacturer shall be used unless otherwise agreed to by the City, in its sole discretion.

If the bid by the lowest responsive and responsible bidder exceeds available funds, the City reserves the right to negotiate with the apparent low bidder pursuant to Section 2.2-4318 of the Code of Virginia. The conditions and procedures under which such negotiation may be undertaken are set forth in Section 2.2-4318, and Section 14.3 of Instructions to Bidders. Any such negotiated Contract shall be subject to final approval by the City in its sole discretion.

Bids may not be withdrawn for a period of sixty (60) calendar days after the opening of bids unless the bid is substantially lower than the other bids because of a clerical error as defined in Section 2.2 - 4330, of the Code of Virginia (1950), as amended. Pursuant to Section 2.2 - 4330 (A)(i), the bidder shall give notice in writing and shall submit the original work papers with such notice to the City of its claim of right to withdraw the bid within two (2) business days after the opening of bids.

The Successful Bidder shall comply with the Code of Virginia nondiscrimination provisions of Section 2.2-4311 and the Drug-free workplace provisions of Section 2.2-4312.

Pursuant to Code of Virginia, Section 2.2 - 4343.1, be advised that the City of Roanoke does not discriminate against faith-based organizations.

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**CITY OF ROANOKE, VIRGINIA**

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## **CITY OF ROANOKE, VIRGINIA**

### **INSTRUCTIONS TO BIDDERS**

#### **SECTION 1. DEFINITIONS**

Definitions contained in Section 1 of the General Conditions are incorporated herein by reference. The bidder should refer to the General Conditions for definitions used in the Contract Documents. Whenever used in the General Conditions or in the Contract Documents, the following terms have the meanings indicated, which are applicable to both the singular and plural and the male and female gender thereof, and where applicable to any other legal entity such as a corporation, partnership, limited liability company, etc.

The section and paragraph headings are inserted for convenience only.

**Architect, Engineer, Architect/Engineer or A/E:** The term used to designate the Architect and/or the Engineer who contracts with the City to provide the Architectural and Engineering services for the project. The Architect/Engineer is a separate Contractor and is referred to herein as the Architect/Engineer or abbreviated as A/E. The term includes any associates or consultants employed by the firm to assist in providing the A/E services.

**Bidder:** The person, firm, corporation, or other entity interested in submitting a bid for the Work to be performed.

**Change Order:** A document issued by Director of Parks and Recreation on or after the effective date of the Contract which is agreed to by the Contractor and approved by the City, and which authorizes an addition, deletion, or revision in the Work, including any adjustment in the Contract Price and/or the Contract Time.

**City or Owner:** The City of Roanoke, Virginia, or its authorized representative.

**City Code:** Refers to the Code of the City of Roanoke (1979), as amended.

**Director of Parks and Recreation:** Director of Parks and Recreation or his authorized representative.

**City Manager:** The City Manager or his authorized representative.

**Code of Virginia:** Refers to the Code of Virginia (1950), as amended. (Sometimes referred to as Va. Code or Virginia Code.)

**Contract Documents:** These documents include, but are not limited to, the Project Manual, Invitation to Bid, the Instructions to Bidders, the Bid Form, the Contract, the Bonds or other Bid Security, the Escrow Agreement, the General Conditions, Supplementary General Conditions, Special Conditions, the Specifications, Addenda or



Change Orders, the Plans and Drawings, any Supplemental Drawings, and any additional documents incorporated by reference in the above.

**Contract:** The written agreement between the parties concerning the performance of the Work and consisting of the Contract Documents.

**Contractor:** The person, firm, corporation, or other entity entering into a contractual agreement with the City to perform the Work.

**Defect, Defective, or Deficient:** An adjective or noun which when modifying or referring to the word Work refers to Work or any part thereof that is unsatisfactory, faulty, or does not conform to the Contract Documents, or does not meet the requirements of any inspections, standards, tests, or approvals referred to in the Contract Documents.

**Document(s):** This term includes, but is not limited to: writings, drawings, items on which words, symbols, or marks are recorded; electronic data of any type; videotapes, recordings, photographs and negatives, digital or otherwise; and any other form of data, writing, or information compilation, however recorded or stored, and regardless of physical form or characteristics.

**Field Order:** A written order issued by Director of Parks and Recreation which clarifies the requirements of the Contract by giving a more complete expression of the drawings or specifications or other documents without any change in the design, the Contract price, or the Contract time.

**Final Acceptance:** The City's acceptance of the project from the Contractor upon confirmation from Director of Parks and Recreation and the Contractor that the project is apparently complete in accordance with the Contract requirements.

**Notice:** All written notices, demands, instructions, claims, approvals, and disapprovals required to obtain compliance with the Contract requirements. Any written notice by either party to the Contract shall be sufficiently given if delivered to or at the last known business address of the person, firm, or corporation constituting the party to the Contract, or to his, her, their, or its authorized agent, representative, or officer.

**Notice to Proceed:** A written notice given by the City at the City's discretion to the Contractor fixing the date on which the Contract time will commence for the Contractor to begin the prosecution of the Work in accordance with the requirements of the Contract Documents.

**Project Inspector:** One or more individuals employed by the City to inspect the Work and/or to act as Resident Inspector to the extent required by the City. The City shall notify the Contractor of the appointment of such Project Inspector(s).

**Provide:** Shall mean to furnish and install ready for its intended use.

**Subcontractor:** A person, firm, partnership, corporation, or other entity having a direct contract with the Contractor or with any other Subcontractor for the performance of the

Work. It includes one who provides on-site labor, but does not include one who only furnishes or supplies material for the project.

**Submittals:** All drawings, diagrams, illustrations, brochures, schedules, samples, electronic data and other data required by the Contract Documents which are specifically prepared by or for the Contractor, Subcontractor, or Supplier, and submitted by the Contractor to illustrate the material, equipment, or layouts, or some other portion of the Work.

**Substantial Completion:** The date certified by Director of Parks and Recreation when construction is sufficiently complete, in accordance with the Contract Documents, so the City can occupy or utilize the Work or designated portion thereof for the purposes for which it is intended.

**Successful Bidder:** The bidder to whom the City makes an award.

**Supplier:** A manufacturer, fabricator, distributor, material man, or vendor who provides only material or supplies for the project, but does not provide on-site labor.

**Work or Project:** The entire completed construction or the various separately identifiable parts thereof as required by the Contract Documents. Work is the result of performing services, furnishing labor, and furnishing and incorporating material and equipment into the construction.

## **SECTION 2. EXAMINATION OF SITE AND CONTRACT DOCUMENTS**

- 2.1** Each bidder is responsible for examining carefully the site of the Work and the Contract and Bid Documents relating to the Work. By submitting a bid, the bidder acknowledges and agrees that it has examined and considered the conditions to be encountered at and adjacent to the site, the character, quality, and quantities of work to be performed, the material to be furnished, other requirements of the Contract Documents, and to have waived any claim or objection based thereon. Claims as a result of failure to have done such examination will not be considered by the City. See Section 8 of the General Conditions entitled "Conditions at Site."
- 2.2** Each bidder shall promptly notify, in writing, the Purchasing Division of any ambiguity, inconsistency, or error which may be discovered upon examination of the Invitation to Bid, any Bid Documents, and/or any related documents.

## **SECTION 3. CLARIFICATION AND ADDENDA**

- 3.1 Questions on Contract Documents:** All questions about the meaning or intent of the Contract Documents shall be directed to the Purchasing Division. Questions received less than seven (7) calendar days prior to the date for opening bids may not be answered. Bidders may only rely upon written addenda

issued by the Purchasing Division and no other communication or interpretation, whether oral or written, shall have any effect or efficacy.

- 3.2 Addenda:** Any changes, interpretations, or clarifications that may be made to the Contract Documents will be in the form of an addendum. Receipt by the bidder of such addendum shall be acknowledged on the Bid Form. **However, all bidders are solely responsible for making sure that they have received and reviewed any and all addenda that may have been issued for this ITB.**
- 3.3 Interpretation:** All decisions made in good faith by the Purchasing Manager on the meaning or interpretation of the Contract Documents shall be final.
- 3.4 Bidders Responsibility:** All bidders are responsible for ensuring that they have received and examined all addenda that may have been issued before submitting their bid.

If you download this Invitation to Bid from the City website and intend to submit a bid, you should notify Purchasing. The City is not responsible for any Invitation to Bid obtained from any source other than the City. Contact Purchasing by telephone at (540) 853-5268, by fax at (540) 853-1513 or by email at [monica.cole@roanokeva.gov](mailto:monica.cole@roanokeva.gov).

- 3.5 Quantities:** Where the bid documents stipulate a unit price, the quantities of the work and material set forth in the proposal form or on the plans approximately represent the work to be performed and material to be furnished and are for the purpose of comparing the bids on a uniform basis. Payment shall be made to the Contractor only for the actual quantities of work performed or material furnished in accordance with the plans and specifications and it is understood that the quantities may be increased or decreased as provided in the General Conditions without in any way invalidating the bid prices.

#### **SECTION 4. TIME FOR COMPLETION**

- 4.1 Time for Completion:** Unless otherwise stated or a specific time period is set forth on the Bid Form, each bidder shall indicate in the appropriate blank the number of consecutive calendar days required by such bidder to fully complete the specified Work, by no later than June 30, 2016. However, no such time period may exceed the number of consecutive calendar days set forth in the Bid Form.
- 4.2 Weather:** The bidder, in preparing and submitting its bid, is required to take into consideration normal weather conditions. Normal weather means a range of weather conditions which might be anticipated, based on weather data for the past ten years. Unusual weather is weather which could not be anticipated based on such data. Normal weather conditions shall be determined from the public historical records available from the National Weather Service. The data

sheets to be used shall be for the locality or localities closest to the site of the Work. No additional compensation will be paid to the Contractor because of unusual weather conditions; however, an extension of time for unusual weather may be considered by the City as indicated in the General Conditions.

## **SECTION 5. CONTRACTORS' LICENSES, PERMITS, FEES, AND TAXES**

- 5.1 State License:** Bidders and all subcontractors are required to comply with all applicable city, state, and federal laws, ordinances, and regulations, including, but not limited to, registration with the Virginia State Corporation Commission if required by law; and are required to be properly licensed in accordance with Sections 54.1-1100, et seq., of the Code of Virginia, which presently requires one to be licensed as a "Class A Contractor" before submitting a bid of One Hundred Twenty Thousand Dollars (\$120,000) or more; or to be licensed as a "Class B Contractor" before submitting a bid of Seven Thousand Five Hundred Dollars to One Hundred Twenty Thousand Dollars (\$7,500 to \$120,000); or to be licensed as a "Class C Contractor" before submitting a bid of One Thousand Dollars to Seven Thousand Five Hundred Dollars (\$1,000 to \$7,500). There are also cumulative total amounts which can require a certain class of license and bidders should check these requirements as well. Bidders shall show evidence of being properly licensed and supply the documents required in Section 14.4 of these Instructions to Bidders. (See also Section 7 of the General Conditions.)
- 5.2 Other Licenses, Permits, Fees, and Taxes:** Successful Bidder is responsible for paying for all licenses, permits, fees, and taxes applicable to the project. Such charges and fees include, but are not limited to the applicable building permits, mechanical and electrical permits, hauling and dumping of material, and if work performed in the City of Roanoke during a calendar year exceeds Twenty-five Thousand Dollars (\$25,000), such bidder will have to possess a City business license and be responsible for paying City of Roanoke business license taxes. See Section 3 of the General Conditions.
- 5.3 Virginia State Corporation Commission:** Each Bidder who is a stock or nonstock corporation, limited liability company, business trust, or a limited partnership or other business entity shall be authorized to transact business in the Commonwealth of Virginia as a domestic or foreign business entity if required by law. Each such Bidder shall include in its bid response the Identification Number issued to it by the Virginia State Corporation Commission (SCC) and should list its business entity name as it is listed with the SCC. Any Bidder that is not required to be authorized to transact business in the Commonwealth as a domestic or foreign business entity as required by law shall include in its bid response a statement describing why the Bidder is not required to be so authorized. (See Va. Code Section 2.2-4311.2).

## **SECTION 6. PREPARATION AND SUBMISSION OF BIDS**

- 6.1 Bid Form:** Bids shall be submitted on the Bid Form furnished, or copy thereof, and shall be completed and signed in ink. A copy of the Bid Form is provided in these specifications for the information of bidders only. Except as may be otherwise stated, all blank spaces in the Bid Form should be filled in and under no conditions shall any changes be made in the phraseology of the Bid Form. Erasures or other changes in a bid amount must be explained or noted over the initials of the bidder. Bids containing any conditions, omissions, unexplained erasures, alterations or items not called for in the bid documents, or irregularities of any kind, may be rejected by the City as being incomplete and/or non-responsive. NO CHANGES MADE TO THE BID FIGURES BY NOTATIONS ON THE OUTSIDE OF THE ENVELOPE WILL BE CONSIDERED IN THE REVIEW AND TABULATION OF BIDS OR FOR ANY OTHER PURPOSE.
- 6.2 Escrow:** In accordance with Section 2.2 - 4334, of the Code of Virginia, for bids of \$200,000 or more for construction of highways, roads, streets, bridges, parking lots, demolition, clearing, grading, excavating, paving, pile driving, miscellaneous drainage structures, and the installation of water, gas, sewer lines and pumping stations, the Bid Form will include a space for the bidder to indicate an option to use the escrow account procedure in order to have retained funds paid to an escrow agent. Otherwise, unless stated in the Supplemental General Conditions, no escrow will be provided.
- 6.3 Signatures:** Each bid must give the full business address of the bidder and be signed by bidder with its usual signature. Bids by partnerships must furnish the full name of all partners and must be signed in the partnership name by one of the members of the partnership or an authorized representative, followed by the signature and designation of the person signing. Bids by corporations must be signed with the legal name of the corporation followed by the name of the state in which they are incorporated and by the signature and designation of the president or other person authorized to bind it in the matter. The name of each person signing shall also be typed or printed below each signature. A bid by a person who affixes to his signature the word "President," "Authorized Agent," or other designation without disclosing such principal firm or employer, may be held to be the bid of the individual signing. Satisfactory evidence of the authority of the president or authorized agent signing on behalf of the corporation shall be furnished upon request by the City.
- 6.4 Bid Amounts:** Bidders shall indicate in the appropriate blank spaces on the Bid Form the amounts for the base bid and any alternates, written with ink or typed, in both words and figures. In the event of a discrepancy between the words and figures expressed in the base bid or alternates, the word amount shall govern. Any unit prices for separate items as called for on the Bid Form shall be written with ink or typed in figures in the appropriate blanks.

## **6.5 NOT USED**

- 6.6 Bid Package Checklist:** Bidders shall deposit with their bid the documents or information set forth in the Bid Package Checklist. See Section 16.

## **SECTION 7. RECEIPT AND OPENING OF BIDS**

- 7.1 Delivery of Bid:** It is the responsibility of the bidder to assure that its bid is delivered to the place designated for receipt of bids and prior to the time set for receipt of bids. No bids received after the time designated for receipt of bids will be considered.
- 7.2 Receipt of Bid:** The Bid Form, the Bid Security, and all other documents required to be submitted with the bid shall be enclosed in a sealed opaque envelope and addressed as follows:

Monica Cole, Senior Buyer  
Purchasing Division  
Noel C. Taylor Municipal Building  
215 Church Avenue, S.W., Room 202  
Roanoke, Virginia 24011

**Place on front of the envelope the project title and bid number as indicated at the top of the Invitation to Bid. Place on front of the envelope the bidder's name, mailing address, and Virginia Contractor number.**

- 7.3 Opening of Bid:** Bids will be opened and read at the time and place stated in the Invitation to Bid. The contents may be made public in accordance with Section 2.2-4342 of the Code of Virginia. The officer or agent of the City, whose duty it is to open them, will decide when the specified time has arrived. No responsibility will be attached to any officer or agent for the premature opening of a bid not properly addressed and identified.
- 7.4 Withdrawing Bid:** After the date of opening of bids, no bid may be withdrawn for at least sixty (60) calendar days after such opening date, except as provided in Section 12 of these Instructions to Bidders.

## **SECTION 8. BID SECURITY**

Each bid must be accompanied by a Bid Security in an amount equal to five (5%) percent of the maximum possible bid price in accordance with Sections 2.2-4336 and 4338 of the Code of Virginia. The Bid Security shall be furnished in one of the following forms:

- a.** Bid Bond, in a form substantially as provided in the Contract Documents, made payable to the City of Roanoke and properly executed by the bidder as Principal

and a Corporate Surety authorized to transact business in the Commonwealth of Virginia. Attorneys-in-fact who execute Bid Bonds must file with the bond a certified copy of their Power of Attorney.

- b. Certified Check or cash deposited with the City of Roanoke Treasurer in the face amount required for the Bid Security and made payable to the City of Roanoke.
- c. Personal Bond or Letter of Credit issued by an authorized financial institution in the face amount required for the Bid Security, made payable to the City of Roanoke. These forms of security shall be submitted for review and must be approved by the City Attorney, in his sole discretion, at least three (3) working days prior to receipt of bids. Approval will be based upon a determination that the form of security offered will adequately protect the interests of the City as equivalent to a corporate surety's bond.
- d. For return of Bid Security, see Sections 13 and 14 of these Instructions to Bidders. (See pages 18-21, Sections 13.2, 13.3, 14.5, and 14.7)

## **SECTION 9. INTENT**

- 9.1 Work Required:** The City requires that the successful bidder perform a complete and satisfactory job in accordance with the Contract Documents.
- 9.2 Conflicts in Contract Documents:** Anything called for by one of the Contract Documents and not called for by the others shall be of like effect as if required or called for by all Contract Documents. In the case of conflict between the Contract Documents, the Contract Documents shall take precedence in the following order: The Contract; addenda starting with the last issued addendum; the Supplemental General Conditions; the General Conditions; the Special Conditions; the specifications with attachments; and the drawings.
- 9.3 Work Not Described:** All work not specifically described in the Contract Documents, yet required to produce a fully functional and properly operating project shall be provided even though every item or minor detail for the proper installation or successful operation of the entire Work is not mentioned in the Contract Documents.
- 9.4 Completion of Work:** The Successful Bidder acknowledges and agrees that it has taken into account in its bid the requirements of the bid and Contract Documents, local conditions, availability of material, equipment, labor, and any other factors which may affect the performance of the Work. The Successful Bidder agrees and warrants that it will complete the Work not later than the time period or date indicated for completion.

## **SECTION 10. MATERIAL AND WORKMANSHIP**

- 10.1 "Or Equal" Clause:** The particular brand, make of material, device, or equipment described in the Contract Documents establishes a standard of required function, economy of operation, dimension, appearance, and quality to be met by any proposed substitution. No substitution will be considered unless a written request for approval has been submitted by the bidder and has been received by the Purchasing Division at least ten (10) calendar days prior to the date for receipt of bids. Each such request shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitute including drawings, cuts, performance and test data, and any other information necessary or required by the City Parks and Recreation Department for an evaluation. A statement setting forth any changes in other material, equipment, or work that incorporation of the substitute would require shall be included. The burden of proof of merit of the proposed substitute is upon the bidder.
- 10.2 Approval of Substitution:** The City Parks and Recreation Department's decision of approval or disapproval of a proposed substitution shall be in its sole discretion and shall be final. If the City Parks and Recreation Department approves any proposed substitution, such approval will be set forth in an addendum issued to all recorded bidders. Bidders shall not rely on approvals made in any other manner.
- 10.3 Adaptation Due to Substitution:** The Successful Bidder shall be responsible for making all changes in the Work necessary to adapt and accommodate any equivalent product or item which it uses. The necessary changes shall be made at the Successful Bidder's sole expense.

## **SECTION 11. STATEMENT OF QUALIFICATIONS**

Each bidder shall be prepared to submit evidence of qualifications, experience, and financial ability to perform the Work set forth in the Contract Documents, should such be required by the Contract Documents or requested by the Purchasing Division. Furthermore, each bidder must notify the Purchasing Division if bidder has been terminated from any contract or job in the last three (3) years and/or if bidder has been during the last three (3) years debarred from bidding on or performing any federal, state or local procurement or job. If so, bidder must supply details of such matters by separate written statements included with bidder's response. Any bidder who is currently debarred will not be eligible to bid on this project.

## **SECTION 12. ERRORS IN BIDS**

- 12.1 Withdrawal of Bid:** A bidder may withdraw its bid from consideration if the price bid was substantially lower than the other bids due solely to a mistake therein, provided the bid was submitted in good faith, and the mistake was a clerical



mistake as opposed to a judgment mistake, and was actually due to an unintentional arithmetic error or an unintentional omission of a quantity of work, labor, or material made directly in the compilation of a bid, which unintentional arithmetic error or unintentional omission can be clearly shown by objective evidence drawn from inspection of original work papers, documents, and material used in the preparation of the bid sought to be withdrawn.

**12.2 Withdrawal Procedure:** The bidder shall give notice in writing and shall submit the original work papers with such notice to the City of its claim of right to withdraw its bid within two (2) business days after the conclusion of the opening of bids as set forth in part (i) of Section 2.2 - 4330 (A), of the Code of Virginia.

**12.3 Withdrawal Requirements:** Other applicable provisions of Section 2.2 - 4330, of the Code of Virginia shall apply to any errors in bids or any requested withdrawal due to errors in bids.

### **SECTION 13. REJECTION OF BIDS**

**13.1 Rejection of Bids:** The City reserves the right to cancel the Invitation to Bid, to reject any or all bids, to reject the bid of a bidder who is not in a position to perform the contract, or to waive any informalities in any bid.

**13.2 Bid Security Return for Rejected Bids:** The Bid Security will be returned to all rejected bidders after the City has issued and posted an Award.

**13.3 Bid Security Return for Unsuccessful Bids:** Should a bid not be accepted by the City within sixty (60) consecutive calendar days after the opening of bids, or within such other time specified in the Bid Documents, each bidder may obtain its Bid Security from the City.

### **SECTION 14. ACCEPTANCE OF BIDS, EVALUATION OF BIDS, AWARD OF CONTRACT, AND SECURITY REQUIREMENTS**

**14.1 Acceptance of Bids:** Each bidder should submit with its bid documentation of bidder's legal name and indicate the type of business entity bidder is operating under; i.e., if a corporation, bidder should enclose a copy of the Certificate of Incorporation issued by the State Corporation Commission; if a partnership, bidder should enclose a copy of the relevant portions of the Partnership Agreement; if a limited liability company, bidder should enclose a copy of the Certificate of Organization.

**14.2 Evaluation and Award to Lowest Responsive and Responsible Bidder:** To determine the lowest responsive and responsible bidder with respect to this bid, the following items may be considered so as to protect the interest of the City:

- a. The total base bid price plus the price of any alternates (aka- additive bid item) the City elects to accept, if any. (This is where a lump sum amount is required.) The City reserves the right to accept alternates in any order or combination.
- b. If a unit price contract is requested, the total amount based on the estimated quantities as set forth in the Bid Form will be considered. (The listed unit prices for each item will control and any multiplication errors may be adjusted by the Purchasing Division using the proper estimated quantities.)
- c. The ability, capacity and skill of the bidder to perform the contract or provide the services and/or items required.
- d. Whether the bidder can perform the contract promptly and within the time specified, without delay or interference.
- e. The character, integrity, reputation, judgment, experience and efficiency of the bidder.
- f. The quality of performance of previous contracts or services.
- g. The previous and existing compliance by the bidder with laws and ordinances relating to the contract, purchase or service.
- h. The equipment and facilities available to the bidder to perform the contract or provide the services and/or items.
- i. The sufficiency of the financial resources and ability of the bidder to perform the contract or provide the services and/or items.
- j. The quality, availability and adaptability of the supplies, materials, equipment or services to the particular use required.
- k. The ability of the bidder to provide future maintenance, parts and service for the use of the subject of the purchase or contract, if required.
- l. Bids shall be evaluated based on the requirements set forth in this Invitation to Bid, and other criteria to determine acceptability such as inspection, testing, quality, workmanship, delivery, suitability for a particular purpose and life cycle cost. The City, in its sole discretion, may elect to waive an informality in any bid.

Should a Contract be awarded to a bidder, it will be awarded to the lowest responsive and responsible bidder. If an award of a contract is made, notice of the award, or the announcement of the decision to award, will be made by

posting a notice of such award or announcement in the foyer area of the second floor of the Noel C. Taylor Municipal Building at 215 Church Avenue, S.W., Roanoke, Virginia 24011.

**14.3 Negotiation of Bid:** If the bid by the lowest responsive and responsible bidder exceeds available funds, the City reserves the right to negotiate with the apparent low bidder pursuant to Section 2.2-4318 of the Code of Virginia. The conditions and procedures under which such negotiation may be undertaken are that the appropriate City officials shall determine that the lowest responsive and responsible bid exceeds available funds and notify such bidder in writing of its desire to negotiate. Thereafter, negotiations with the apparent low bidder may be held to obtain a Contract within available funds involving discussions of reduction of quantity, quality, or other cost saving mechanisms. Any such negotiated Contract shall be subject to final approval of the City, in the sole discretion of the City.

**14.4 Contract Execution:** The Successful Bidder shall be required, within ten (10) consecutive calendar days after receipt of the Contract, to return the signed Contract, and furnish to the City all other documents as enumerated hereinafter:

- a. Performance Security (if applicable)
- b. Labor and Material Payment Security (if applicable)
- c. Certificate of Insurance
- d. Escrow Agreement (if applicable)
- e. Employment Projection Form (if applicable):

The Successful Bidder for a project requiring at least thirty (30) calendar days work will be required to submit a completed Employment Projection Form along with the signed Contract. A copy of this form is included in these bid documents. Completion of the form does not create an obligation on the part of the bidder to hire any referred applicant.

**14.5 Security:** A Performance Security and a Labor and Material Payment Security each in the amount of one hundred percent (100%) of the contract amount for all contracts in accordance with Sections 2.2-4337 and 4338 of the Code of Virginia, shall be furnished by the Successful Bidder in one of the following forms:

- a. A Performance Bond and a Labor and Material Payment Bond, on forms as provided in the Contract Documents, made payable to the City of Roanoke, properly executed by the successful bidder as Principal and a Corporate Surety authorized to transact business in the Commonwealth of

Virginia. Attorneys-in-fact who execute the bonds must file with each bond a certified copy of their Power of Attorney.

- b.** Certified Checks or Cash Escrow in the face amount required for the Performance Security and the Labor and Material Payment Security each made payable to the City of Roanoke.
- c.** Personal Bond or Letter of Credit issued by an authorized financial institution in the face amount required for the Performance Security and the Labor and Material Payment Security, made payable to the City of Roanoke. These forms of security must be approved by the City Attorney, in his/her sole discretion. Approval will be based upon a determination that the form of security offered will adequately protect the interests of the City as equivalent to a corporate surety's bond.

**14.6 Escrow Agreement Form:** In the event the Contract meets the requirements as stipulated in Section 6.2 of these Instructions to Bidders and the Successful Bidder elects to use the escrow account procedure, the Escrow Agreement Form, as provided in the Contract Documents, shall be executed and submitted to the City within fifteen (15) calendar days after receipt of written notification of bid acceptance. If the executed Escrow Agreement Form is not submitted within the fifteen-day period, the Successful Bidder shall forfeit and waive the rights to the use of the escrow account procedure.

**14.7 Bid Security Return for Successful Bid:** Upon the execution of the Contract and approval of the Performance and Payment Securities, the Bid Security shall be returned to the Successful Bidder. Should the successful bidder fail or refuse to execute the Contract or furnish the required Performance and Payment Securities within the stipulated time, the Bid Security shall be due and paid to the City and the City shall be entitled to collect the Bid Security. In addition, the City may pursue any and all other remedies available to it at law or in equity against said bidder.

## **SECTION 15. ETHICS IN PUBLIC CONTRACTING**

The provisions, requirements, and prohibitions as contained in Sections 2.2 - 4367 through 2.2-4377, of the Code of Virginia, pertaining to bidders, offerors, contractors, and subcontractors are applicable to this project.

## **SECTION 16. BID PACKAGE CHECKLIST**

The following items must be completed and included in your bid package. Failure to include all required forms may result in rejection of the bid. If any of these documents were not included with your Project Manual, please contact the Purchasing Division at (540) 853-2871.

- a.** Completed Bid Form (all pages)

- b. Properly Executed Bid Security (Bid Bond, Certified or Cashier's Check, etc., if applicable)
- c. In addition to the above items, bidder should submit documentation verifying bidder's proper legal name.

## **SECTION 17. PROTESTS**

Any bidder who wishes to protest or object to any award made or other decisions made pursuant to the Invitation to Bid may do so only in accordance with the provisions of Sections 2.2-4357, 4358, 4359, 4360, 4363, and 4364 of the Code of Virginia, and only if such is provided for in such Code section.

## **SECTION 18. MISCELLANEOUS**

- a. No bidder shall confer on any public employee having official responsibility for a purchasing transaction any payment, loan, subscription, advance, deposit or money, service, or anything of more than nominal value, present or promised, unless consideration of substantially equal or greater value is exchanged.
- b. The City may make investigations to determine the ability of the bidder to perform or supply the services or items as described in this Invitation to Bid. The City reserves the right to reject any bid if the bidder fails to satisfy the City that it is qualified to carry out the obligations of the proposed contract.
- c. The Successful Bidder must comply with the nondiscrimination provisions of Section 2.2-4311 of the Code of Virginia, which are incorporated herein by reference.
- d. The Successful Bidder must comply with the drug-free workplace provisions of Section 2.2-4312 of the Code of Virginia, which are incorporated herein by reference.
- e. It is the policy of the City of Roanoke to maximize participation by minority and women owned business enterprises, small businesses and veteran-owned businesses in all aspects of City contracting opportunities.
- f. The Successful Bidder shall comply with all applicable City, State, and Federal laws, codes, provisions, and regulations.
- g. Providers of any outside services shall be subject to the same conditions and requirements as the Successful Bidder in regards to law, code or regulation compliance. The City reserves the right of approval for any subcontract work, including costs thereof.

- h. This Invitation to Bid and all responses are subject to Section 2.2-4342 of the Code of Virginia regarding public inspection of records and the procedures a bidder must follow to protect trade secrets and proprietary information.
- i. Conflict of Interests Act. The provisions, requirements and prohibitions as contained in Sections 2.2-3100, et. seq. of the Code of Virginia are applicable to this Invitation to Bid.
- j. The procurement provisions of the Code of the City of Roanoke (1979), as amended, Sections 23.2-1, et. seq., as well as the City Procurement Manual, apply to this Invitation to Bid, unless specifically modified herein. The City's Procurement Manual can be reviewed at the Purchasing office.
- k. Insurance. Successful Bidder, and any of its subcontractors, shall, at its or their sole expense, obtain and maintain during the life of the resulting contract the insurance policies and bonds required. Any required insurance policies and bonds shall be effective prior to the beginning of any work or other performance by Successful Bidder, or any of its subcontractors, under any resultant contract. The policies and coverages required are those as may be referred to in the sample contract and/or the general conditions or other documents of this Invitation to Bid.
- l. Each bidder is to notify the Purchasing Division if any of bidder's owners, officers, employees, or agents, or their immediate family members, is currently, or has been in the past year, an employee of the City of Roanoke or has any responsibility or authority with the City that might affect the procurement transaction or any claim resulting therefrom. If so, please provide the Purchasing Division with the complete name and address of each such person and their connection to the City of Roanoke. Each bidder is advised that the Ethics in Public Contracting and Conflict of Interests Act of the Code of Virginia, as set forth in this Invitation to Bid, apply to this Invitation to Bid. Such information should be provided in writing before the bid opening date or may also be provided with the bid response.

**SECTION 19. NOT USED.**

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**ADOPTED FEBRUARY 22, 2005**

**CITY OF ROANOKE, VIRGINIA**

Plan for Participation in Procurement  
Transactions of Small Businesses and  
Businesses Owned by Women and Minorities

1. **POLICY STATEMENT**

It is the policy of the City of Roanoke to encourage participation by small businesses and minority-owned and women-owned business enterprises in all aspects of City contracting opportunities. In order to demonstrate its commitment to this policy, the procedures set forth in this document shall be followed whenever possible.

2. **DEFINITIONS**

A minority business enterprise ("MBE" or "MBES" in the plural form) is a business that is both owned and controlled by minorities. This means that minorities must own fifty-one percent of the business, and that they must control the management and daily operations of the business.

A women business enterprise ("WBE" or "WBES" in the plural form) is a business that is both owned and controlled by women. This means that women must own fifty-one percent of the business, and that they must control the management and daily operations of the business.

A small business ("SB" or "SBS" in the plural form) is a United States business that does not exceed fifty employees, is independently owned and operated, and is not dominant in its field or operation or an affiliate or subsidiary of a business dominant in its field of operation.

A minority is an individual who is a citizen or lawful resident of the United States and is Black, Hispanic, Asian American, American Indian, Alaskan Native or a member of another group who the Small Business Administration has determined is economically and socially disadvantaged under Section 8 (a) of the Small Business Act.

3. **EMPLOYMENT DISCRIMINATION PROHIBITED**

Every contract of over ten thousand dollars (\$10,000.00) to which the City is a party shall contain the provisions in subparagraphs (a) and (b) herein:

(a) During the performance of this contract, the contractor agrees as follows:

1. The contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the contractor. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
  2. The contractor, in all solicitations or advertisements for employees placed by or on behalf of the contractor, will state that such contractor is an equal opportunity employer.
  3. Notices, advertisement and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.
- (b) The contractor will include the provisions of the foregoing subparagraphs (a)(1), (2) and (3) in every subcontract or purchase order of over ten thousand dollars (\$10,000), with regard to the contract with the City, so that the provisions will be binding upon each subcontractor or vendor.

#### 4. LIST OF MBEs, WBEs AND SBs

The City's Purchasing Division will establish and maintain a list of minority-owned and women-owned business enterprises. As appropriate, this list may include vendors at regional, state and national levels. A separate list of local MBES and WBES shall be established and, when established, be made available or the master list shall be searchable for local vendors. The local area shall consist of the Roanoke Valley, which shall include those areas included in the metropolitan statistical area as defined by the United States Office of Management and Budget for Census Bureau data purposes. The regional area shall include all cities, counties and towns, within the Commonwealth of Virginia, any part of which fall within a 50 mile radius of the City of Roanoke.

The City's Purchasing Division will establish and maintain a list of small businesses at the regional level.

The Purchasing Division shall serve as the primary contact for businesses to request to be added to the MBE/WBE list or the small business list and for businesses, organizations or individuals desiring access to the lists.

In maintaining these lists, the City's Purchasing Division will cooperate with the Virginia Department of Minority Business Enterprise, the United States Small Business Administration and other public or private agencies.



The Purchasing Division will maintain a list of agencies and organizations that provide assistance and/or education to MBES, WBES and SBS and inform such businesses of the resources available to them. The list will contain the types of services offered and contact information. The Purchasing Division will assist other organizations in publicizing training opportunities for MBES, WBES and SBS.

## 5. ALL CONTRACTS

In procuring goods and services for the City, all City employees shall follow the guidelines and mandates contained in the Purchasing Division's Procurement Manual with regard to solicitation of MBES and WBES.

When bids or proposals are solicited directly from potential contractors, solicitations shall include, when possible, appropriate businesses from the lists maintained by and/or available to the Purchasing Division, including but not limited to the list from the Virginia Department of Minority Business Enterprise.

All solicitation, addenda and award actions over \$30,000 shall be posted on the City of Roanoke's web site <http://www.roanokeva.gov>.

Invitation to Bid solicitation notices over \$50,000 and Requests for Proposals estimated to be over \$30,000 shall be advertised in both The Roanoke Times and The Roanoke Tribune whenever possible. Such Invitation to Bid solicitation notices and Requests for Proposals shall also be advertised on RVTV.

## 6. CONSTRUCTION CONTRACTS

This paragraph shall apply to all construction contracts whenever advertising of the Invitation to Bid is required.

The bid documents will contain a list of, or a reference to a list of, MBES, WBES and SBS. The list will be provided to assist and encourage the general contractors' use of the listed businesses as subcontractors.

The City will provide a copy of the plans and specifications for all construction projects to the Southwest Virginia Community Development Fund, F. W. Dodge of Roanoke, and Valley Construction News plan room(s) so that MBES, WBES and SBS can review the documents. The documents will also be available for review, at no charge, at the Office of Director of Parks and Recreation.

Director of Parks and Recreation, the Purchasing Manager and the Project Engineer will require that general contractors make a "best or good faith effort" to seek the participation of and utilize MBES, WBES and SBS as suppliers and subcontractors. General contractors will be required to show that they have made efforts to recruit MBES, WBES and SBS by incorporating into the bid or proposal form:

- a. Statements indicating efforts to negotiate with MBES, WBES and SBS and the results of such efforts. Bidders will be required to list those MBES, WBES and SBS from whom quotations for labor, materials, and/or services have been solicited, and state which MBES, WBES and SBS, if any, the contractor will use on the project if awarded the bid; and
- b. A certification that the contractor has made a good faith effort to utilize MBES, WBES and SBS whenever possible.

A bid response that does not contain such statements and certification will be deemed non-responsive and will be rejected.

If the contractor listed MBES, WBES and/or SBS that it would use on the project if awarded the bid and the contractor is awarded the bid, the contractor will be required to use his or her best efforts to utilize the MBES, WBES and SBS identified by the contractor unless the contractor can demonstrate a nondiscriminatory, sound, business reason for not using the MBE, WBE or SB. Director of Parks and Recreation, in his or her sole discretion, will determine whether or not the contractor has demonstrated a nondiscriminatory, sound, business reason.

The contractor, in every monthly request for payment, shall submit a status report of MBE, WBE, and SB participation in the project to date. Payment shall not be issued to the contractor until such status report is submitted.

The Purchasing Manager will closely monitor the requirements of this section.

#### 7. RACIAL DISCRIMINATION IN CONSTRUCTION CONTRACT BONDING AND INSURANCE

In construction contracting, if any person is found by the City Manager or a designee to have engaged in discrimination on the basis of race or gender in the granting of bonds or insurance to persons who contract with or desire to contract with the City, or to persons who receive subcontracts or desire to receive a subcontract in connection with a City contract, the person shall be deemed unqualified to submit a bond or insurance for any City construction contract unless and until the City Manager or designee determines that the discrimination has been purged and that adequate assurances have been made that it will not recur. Any determination by the City Manager of a violation of this section shall be reported in writing to City Council.

#### 8. FEDERAL, STATE OR OTHER GRANT REQUIREMENTS

In addition to the provisions of this Plan, when the City is using funds subject to federal, state or other grant requirements with regard to MBES, WBES and/or SBS, the City's Department managing the specific solicitation will take all necessary affirmative steps to assure that the requirements of the grant or program are met.

## 9. ECONOMIC DEVELOPMENT

The Department of Economic Development will assist the Purchasing Division by providing MBES, WBES and SBS with information regarding the resources available to them and by referring such businesses to the Purchasing Division for additional information.

The Department of Economic Development will also include MBES, WBES and SBS in any programs it has to introduce and familiarize businesses with opportunities in the City.

## 10. DEBARMENT

Any offeror or bidder, or any principal thereof or person associated therewith, found to have engaged in substantial and intentional misrepresentation concerning either good faith MBE, WBE and/or SB participation efforts or its status as a minority owned, women owned or small business shall be debarred from any City contracting for a period of two (2) years. This debarment shall also extend to any successor firm substantially controlled or managed, whether directly or indirectly, by any debarred individual. This determination shall be made by the City Manager or a designee; and any debarment shall be reported in writing to Council.

## 11. REPORTING

The Purchasing Manager shall, at the conclusion of each fiscal year, report to the City Manager for report to City Council on the Purchasing Division's compliance with this Plan and efforts made pursuant to the Plan. The report shall also include the level of participation by MBES, WBES and SBS in contracts that have been awarded by the City through formal solicitations during that fiscal year.

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**CITY OF ROANOKE, VIRGINIA**

**BID FORM**

DATE: \_\_\_\_\_

SUBMITTED BY: \_\_\_\_\_  
(Exact Legal Name of Bidder)

**NOTE: ALL PAGES OF THE BID FORM ARE TO BE INCLUDED IN THE COMPLETED BID. ALSO, BIDS CONTAINING ANY CONDITIONS, OMISSIONS, UNEXPLAINED ERASURES, ALTERATIONS OR ITEMS NOT CALLED FOR IN THE BID, OR IRREGULARITIES OF ANY KIND, MAY BE REJECTED BY THE CITY AS BEING NON-RESPONSIVE. NO CHANGES ARE TO BE MADE TO THE BID FORM. ANY CHANGES TO A BID AMOUNT MUST BE INITIALED BY THE AUTHORIZED PERSON SIGNING THE BID FORM.**

The undersigned hereby proposes and agrees, if this bid is accepted by the City of Roanoke, to enter into a Contract with the City of Roanoke, Virginia, (hereafter - City or Owner) to furnish all equipment, materials, labor, and services necessary to provide construction of a new tennis facility in Rivers Edge Park-North in the City of Roanoke, Virginia. The Project will include, but is not limited to, clearing, grading, concrete, construction, asphalt paving, fencing, and bioretention pond construction and associated work , Invitation to Bid No. 16-02-05A, in accordance with the Contract Documents as prepared by or for the City of Roanoke.

The undersigned agrees that the following Lump Sum Price will become a part of the Contract.. The Lump Sum Price shall include all labor, materials, equipment, services, overhead, profit, insurance, bonds, taxes, etc., to cover the finished work of the several kinds called for in place.

DESCRIPTION	LUMP SUM BID PRICE
Construction of Rivers Edge Park North tennis facility as described herein.	\$ _____

**ALTERNATE NO. 1**

DESCRIPTION	LUMP SUM BID PRICE
Construction of Rivers Edge Park North tennis facility as described herein, INCLUDING PAVEMENT EDGING WITH CURBING.	\$ _____

The undersigned acknowledges the receipt of the following addenda to the Contract Documents:

Addendum Number _____	Dated _____
Addendum Number _____	Dated _____
Addendum Number _____	Dated _____

The undersigned hereby agrees, if this bid is accepted by the City, to commence work with an adequate force and equipment on the date stipulated in the written "Notice to Proceed" from the Director of Parks and Recreation and, unless otherwise directed by the Director of Parks and Recreation to complete all park improvements as identified herein by no later than June 30, 2016.

By submitting a bid, the undersigned agrees it will not withdraw its bid during the time period provided for in the Invitation to Bid, except as provided for therein.

The Bidder, by submission of this bid, hereby certifies that such Bidder has read all of the bid documents and such Bidder is making the certifications contained in, required by, and/or referred to in the bid documents and agrees to be bound by such certifications. Such Bidder further agrees that Bidder, if awarded a contract for this Project, shall provide the work, services, materials, and any other items as required by the bid documents and in compliance with such bid documents, Federal, state, and/or local rules, regulations, and/or procedures contained in the bid documents and/or any resultant contract, or referred to therein. Furthermore, if there is any conflict in any of the documents, the more stringent provisions shall take precedence unless otherwise required by Federal, State, and/or local laws, documents, regulations, rules, and/or procedures, in which case they will take precedence in that order unless otherwise required by law.

The undersigned agrees that if this bid is accepted by the City, the failure or refusal of the undersigned to execute the Contract with the City and furnish to the City the required bonds and certificates of insurance within ten (10) consecutive calendar days from receipt of the Contract Documents may result in a payment of the Bid Security to the City as liquidated damages.

The attention of each bidder is directed to Code of Virginia, Sections 54.1-1100, et. seq., which requires certain licenses for contractors, tradesmen, and others. Each bidder is required to determine which license, if any, it is required to have under such sections. Complete the following:

Bidder \_\_\_\_\_ does have \_\_\_\_\_ does not have a Virginia Contractor's License. (Check appropriate blank.)

If bidder has a Virginia Contractor's License, circle the class bidder has and list the number.

Licensed "Class A", "Class B", or "Class C" Virginia Contractor Number \_\_\_\_\_  
Identify Specialty \_\_\_\_\_

If bidder has another type of Virginia License, please list the type and number:

Type of license: \_\_\_\_\_ Number: \_\_\_\_\_

Bidder is a \_\_\_\_\_ resident or \_\_\_\_\_ nonresident of Virginia. (Check appropriate blank. See Code of Virginia, Sections 54.1-1100, et. seq.)

The attention of each Bidder is directed to Virginia Code Section 2.2-4311.2 (effective July 1, 2010) which requires a bidder organized or authorized to transact business in the Commonwealth of Virginia pursuant to Title 13.1 or Title 50 of the Code of Virginia, as amended, or as otherwise required by law, shall include in its bid the Identification Number issued to such bidder by the Virginia State Corporation Commission (SCC). Furthermore, any bidder that is not required to be authorized to transact business in the Commonwealth of Virginia as a domestic or foreign business entity under Title 13.1 or Title 50 or as otherwise required by law shall include in its bid a statement describing why the bidder is not required to be so authorized. Please complete the following by checking the appropriate line that applies and providing the requested information:

A. \_\_\_\_\_ Bidder is a Virginia business entity organized and authorized to transact business in Virginia by the SCC and such bidder's Identification Number issued to it by the SCC is \_\_\_\_\_.

B. \_\_\_\_\_ Bidder is an out-of-state (foreign) business entity that is authorized to transact business in Virginia by the SCC and such bidder's Identification Number issued to it by the SCC is \_\_\_\_\_.

C. \_\_\_\_\_ Bidder does not have an Identification Number issued to it by the SCC and such bidder is not required to be authorized to transact business in Virginia by the SCC for the following reason(s):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Please attach additional sheets of paper if you need more space to explain why such bidder is not required to be authorized to transact business in Virginia.

The undersigned states and certifies that it has made a best or good faith effort to seek the participation of and utilize MBES, WBES, SBS and VBS as suppliers and subcontractors whenever possible for this Project.

State the complete legal name of the bidder, exactly as it is recorded with the State Corporation Commission, if recorded there.

LEGAL NAME \_\_\_\_\_

BY \_\_\_\_\_ TITLE \_\_\_\_\_  
(TYPED NAME: \_\_\_\_\_)

SIGNED NAME \_\_\_\_\_

State Corporation Commission Identification No. \_\_\_\_\_

DELIVERY ADDRESS \_\_\_\_\_

MAILING ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP CODE \_\_\_\_\_

TELEPHONE \_\_\_\_\_ FAX \_\_\_\_\_

CONTACT EMAIL ADDRESS \_\_\_\_\_

ESCROW ACCOUNT REQUESTED (if applicable): YES \_\_\_\_\_ NO \_\_\_\_\_

DELIVERY OF BIDS: See Section 7.1 of the Instructions to Bidders.

Monica Cole, Senior Buyer  
Purchasing Division  
Noel C. Taylor Municipal Building  
215 Church Avenue, S.W., Room 202,  
Roanoke, Virginia 24011

**Place on front of the envelope the project title as indicated at the top of the Invitation to Bid. Place on front of the envelope the bidder's name, mailing address, and Invitation to Bid No.**

TENNIS COURTS RIVERS EDGE PARK- NORTH  
ROANOKE, VIRGINIA  
ITB# 16-02-05A

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**CITY OF ROANOKE, VIRGINIA**

**BID BOND**

KNOW ALL MEN BY THESE PRESENTS, THAT WE, THE UNDERSIGNED, \_\_\_\_\_, as Principal, and \_\_\_\_\_, as Surety, are hereby held and firmly bound unto \_\_\_\_\_, as City or Owner, in the penal sum of \_\_\_\_\_ (\$\_\_\_\_\_) for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns. Signed, sealed, and delivered this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

The condition of the above obligation is such that whereas the Principal has submitted to the \_\_\_\_\_ a certain bid, attached hereto and hereby made a part hereof, to enter a contract in writing for the \_\_\_\_\_.

NOW, THEREFORE, if the bid shall be rejected, or if the bid shall be accepted and the Principal shall execute and deliver to the City a Contract in the Form of Contract contained in the proposed Contract Documents, properly completed in accordance with the bid, and shall furnish bond for his faithful performance of the Contract and for the payment of all persons performing labor or furnishing materials in connection herewith within the specified time period, and shall in all other respects perform the agreement created by the acceptance of the bid, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of the Surety and its bond shall be in no way impaired or affected by any extension of the time within which the City may accept such bid; and the Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunder set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

Attest: \_\_\_\_\_ (SEAL)  
Principal

By \_\_\_\_\_  
Title

Witness to signature of  
Attorney-in-Fact: \_\_\_\_\_ (SEAL)  
Surety

By \_\_\_\_\_  
Attorney-in-Fact  
(Attorneys-in-fact affix seal and attach current original or certified copy of power of attorney.)



**(ONLY IF APPLICABLE)**

(Name of Escrow Agent)

("Surety") provides:

\_\_\_\_\_ ("the contract"). This Agreement is pursuant to, but in no way amends or modifies, the contract. Payments made hereunder or the release of funds from escrow shall not be deemed approval or acceptance of performance by the Contractor. Payments should be made to \_\_\_\_\_ and mailed to \_\_\_\_\_

(Name and Address of Escrow Agent).

In order to assure full and satisfactory performance by the Contractor of its obligations under the contract, the City is required thereby to retain certain amounts otherwise due the Contractor. The Contractor has, with the approval of the City, elected to have these retained amounts held in escrow by the Escrow Agent. This agreement sets forth the terms of the escrow. The Escrow Agent shall not be deemed a party to, bound by, or required to inquire into the terms of, the contract or any other instrument or agreement between the City and the Contractor.

### III.

The City shall from time to time pursuant to its contract pay to the Escrow Agent amounts retained by it under the contract. Except as to amounts actually withdrawn from escrow by the City, the Contractor shall look solely to the Escrow Agent for the payment of funds retained under the contract and paid by the City to the Escrow Agent.

The risk of loss by diminution of the principal of any funds invested under the terms of this contract shall be solely upon the Contractor.

Funds and securities held by the Escrow Agent pursuant to this Escrow Agreement shall not be subject to levy, garnishment, attachment, lien, or other process whatsoever. Contractor agrees not to assign, pledge, discount, sell or otherwise transfer or dispose of his interest in the escrow account or any part thereof, except to the Surety.

### IV.

Upon receipt of checks drawn by the City and made payable to it as escrow agent, the Escrow Agent shall promptly notify the Contractor, negotiate the same and deposit or invest and reinvest the proceeds in approved securities in accordance with the written instructions of the Contractor. In no event shall the Escrow Agent invest the escrowed funds in any security not approved, as set forth in Section V. below.

### V.

The following securities, and none other, are approved securities for all purposes of this Agreement:

- (1) United States Treasury Bonds, United States Treasury Notes, United States Treasury Certificates of Indebtedness or United States Treasury Bills,
- (2) Bonds, notes and other evidences of indebtedness unconditionally guaranteed as to the payment of principal and interest by the United States,
- (3) Bonds or notes of the Commonwealth of Virginia,
- (4) Bonds of the City of Roanoke, Virginia, if such bonds carried, at the time of purchase by the Escrow Agent or deposit by the Contractor, a Standard and Poor's or Moody's Investor Service rating of at least "A", and
- (5) Certificates of deposit issued by commercial Banks located within the Commonwealth, including, but not limited to, those insured by the Escrow Agent and its affiliates.

- (6) Any bonds, notes, or other evidences of indebtedness listed in Sections (1) through (3) may be purchased pursuant to a repurchase agreement with a bank, within or without the Commonwealth of Virginia having a combined capital, surplus and undivided profit of not less than \$25,000,000, provided the obligation of the Bank to repurchase is within the time limitations established for investments as set forth herein. The repurchase agreement shall be considered a purchase of such securities even if title, and/or possession of such securities is not transferred to the Escrow Agent, so long as the repurchase obligation of the Bank is collateralized by the securities themselves, and the securities have on the date of the repurchase agreement a fair market value equal to at least 100% of the amount of the repurchase obligation of the Bank, and the securities are held by a third party, and segregated from other securities owned by the Bank.

No security is approved hereunder which matures more than five years after the date of its purchase by the Escrow Agent or deposit by the Contractor.

#### VI.

The Contractor may from time to time withdraw the whole or any portion of the escrowed funds by depositing with the Escrow Agent approved securities as set forth in Section V. above in an amount equal to, or in excess of, the amount so withdrawn. Any securities so deposited or withdrawn shall be valued at such time of deposit or withdrawal at the lower of par or market value, the latter as determined by the Escrow Agent. Any securities so deposited shall thereupon become a part of the escrowed fund.

Upon receipt of a direction signed by the City Manager or Assistant City Manager, the Escrow Agent shall pay the principal of the fund, or any specified amount thereof, to the City or the Contractor as the City may direct. If payment is to be made to the City, it shall be made in cash. However, if payment has been authorized to be made to the Contractor, the Contractor may specify to the Escrow Agent if payment is to be made in cash or in kind. Such payment and delivery shall be made as soon as is practicable after receipt of the direction.

#### VII.

For its services hereunder the Escrow Agent shall be entitled to a reasonable fee in accordance with its published schedule of fees or as may be agreed upon by the Escrow Agent and the Contractor. Such fee and any other costs of administration of this Agreement shall be paid from the income earned upon the escrowed fund and, if such income is not sufficient to pay the same, by the Contractor.

#### VIII.

The net income earned and received upon the principal of the escrowed fund shall be paid over to the Contractor in quarterly or more frequent installments. Until so

paid or applied to pay the Escrow Agent's fee or any other costs of administration such income shall be deemed a part of the principal of the fund.

IX.

The Surety undertakes no obligation hereby but joins in this Agreement for the sole purpose of acknowledging that its obligations as surety for the Contractor's performance of the contract are not affected hereby.

WITNESS the following signatures, all as of the day and year first above written.

Attest: (if corporation)  
Witness: (if individual)

\_\_\_\_\_  
Typed Name of Contractor

\_\_\_\_\_  
President/Vice-President;  
Partner or Owner (Seal)

Attest:

\_\_\_\_\_  
Typed Name of Escrow Agent

\_\_\_\_\_  
Bank Officer

\_\_\_\_\_  
Vice President

Witness:

\_\_\_\_\_  
Typed Name of Surety Company

Attest:

By: \_\_\_\_\_  
Attorney-In-Fact  
City of Roanoke, Virginia

\_\_\_\_\_  
City Clerk/Deputy City Clerk

\_\_\_\_\_  
City Manager

Approved as to form:

Approved as to execution:

\_\_\_\_\_  
City Attorney/Assistant City Attorney

\_\_\_\_\_  
City Attorney/Assistant City Attorney

**CITY OF ROANOKE, VIRGINIA**

**SAMPLE CONTRACT**

THIS CONTRACT, is dated this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_,  
between \_\_\_\_\_

\_\_\_\_\_, hereinafter referred to as the "Contractor",  
and the City of Roanoke, Virginia, a municipal corporation, chartered under the laws of  
the Commonwealth of Virginia, hereinafter referred to as the "City" or "Owner";

**WITNESSETH:**

THAT, WHEREAS, the Contractor has been awarded a contract by the City for  
furnishing all equipment, materials, goods, labor, and services necessary for providing a  
tennis facility and associated Work, at Rivers Edge Park-North, all in a proper and  
timely manner and in accordance with the Contract Documents, hereinafter and in the  
Contract Documents referred to as the "Work";

WHEREAS, the Contractor has entered into a performance and a payment bond,  
with surety, each in the penalty of One Hundred Percent (100%) of the Contract sum,  
payable to the City of Roanoke as required by the Contract Documents;

NOW, THEREFORE, THIS AGREEMENT WITNESSETH:

**ARTICLE 1.** That, for and in consideration of the sums of money hereinafter  
specified to be paid by the City to the Contractor for the Work provided in the Contract  
Documents to be performed by the Contractor, the Contractor hereby covenants and  
agrees with the City to fully construct, perform, and complete the Work in a good and  
workmanlike manner in accordance with the Contract Documents to produce a fully  
functional and properly operating project within the time stipulated, time being made of  
the essence of this Contract; it being agreed by the parties hereto that the Contract  
Documents consist of this Contract and those items set forth in the definition of Contract  
Documents in Section 1 of the General Conditions and includes the following, all of  
which are and constitute a part of this Contract as if attached hereto or set out in full  
herein, viz:

Invitation to Bid contained in the Project Manual dated January 15, 2016

Instructions to Bidders dated January 15, 2016

General Conditions dated January 15, 2016

Supplemental General Conditions, if any, as contained in the Project Manual dated

January 15, 2016

Insurance Requirements (Exhibit 1)

Plans and Drawings as contained or listed in the Project Manual dated \_\_\_\_\_

Specifications as contained in the Project Manual dated \_\_\_\_\_

Special Conditions or similar documents, if any, as may be contained in the Project Manual dated \_\_\_\_\_

Bid Form completed by Contractor for this project

Ordinance No. \_\_\_\_\_ adopted \_\_\_\_\_

Contractor's Performance Security

Contractor's Labor and Material Payment Security

Escrow Agreement, if any

**ARTICLE 2.**      **CONTRACT SUM:** The City covenants and agrees to pay the Contractor for the Contractor's complete and satisfactory performance of the Work, in the manner and at the times set out in the Contract Documents, in current funds, the Contract Sum of \_\_\_\_\_ Dollars (\$\_\_\_\_\_), as provided for in the Contract Documents and as the Contract Sum may be increased or decreased by additions and/or reductions in the Work or as the Contract Sum may be decreased by by setoff or as provided for in the Contract Documents or as allowed by law.

**ARTICLE 3.**      **TIME OF COMMENCEMENT AND COMPLETION:** The Contractor shall commence the Work to be performed under this Contract on such date as is established and fixed for such commencement by written notice to proceed given by the Director of Parks and Recreation to the Contractor, and the Contractor covenants and agrees to fully construct, perform, and complete the Work by no later than June 30, 2016. The Contractor further agrees that the Work shall be started promptly upon receipt of such notice and shall be prosecuted regularly, diligently, and uninterruptedly at a rate of progress that will ensure full completion thereof in the shortest length of time consistent with the Contract Documents.

**ARTICLE 4.**      **NOT USED.**

**ARTICLE 5.**      **PAYMENT FOR WORK:** Construction estimates for payment, including the final payment request, submitted by the Contractor shall be in accordance with the provisions of Sections 20, 21, and 22 of the General Conditions and such other provisions of the Contract Documents that may be applicable. Final

payment will not be made until the Work has been fully and satisfactorily completed, the Contract duly performed, and Certificate of Final Acceptance has been issued by the Director of Parks and Recreation, all as provided for in the Contract Documents.

**ARTICLE 6.**      **NONWAIVER:** Contractor agrees that the City's waiver or failure to enforce or require performance of any term or condition of this Contract or the City's waiver of any particular breach of this Contract by the Contractor extends to that instance only. Such waiver or failure is not and shall not be a waiver of any of the terms or conditions of this Contract or a waiver of any other breaches of the Contract by the Contractor and does not bar the City from requiring the Contractor to comply with all the terms and conditions of the Contract and does not bar the City from asserting any and all rights and/or remedies it has or might have against the Contractor under this Contract or by law.

**ARTICLE 7.**      **FORUM SELECTION AND CHOICE OF LAW:** By virtue of entering into this Contract, the Contractor submits itself to a court of competent jurisdiction in the City of Roanoke, Virginia, and further agrees that this Contract is controlled by the laws of the Commonwealth of Virginia and that all claims, disputes, and other matters shall only be decided by such court according to the laws of the Commonwealth of Virginia.

**ARTICLE 8.**      **SEVERABILITY:** If any provision of this Contract, or the application of any provision hereof to a particular entity or circumstance, shall be held to be invalid or unenforceable by a court of competent jurisdiction, the remaining provisions of the Contract shall not be affected and all other terms and conditions of the Contract shall be valid and enforceable to the fullest extent permitted by law.

**ARTICLE 9.**      **NONDISCRIMINATION:**

- A. During the performance of this Contract, the Contractor agrees as follows:
1. The Contractor will not discriminate against any Subcontractor, employee, or applicant for employment because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by State law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the Contractor. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
  2. The Contractor, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, will state that such Contractor is an equal employment opportunity employer.

3. Notices, advertisements, and solicitations placed in accordance with federal law, rule, or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.
- B. The Contractor will include the provisions of the foregoing Subsections A (1), (2), and (3) in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

**ARTICLE 10.** Pursuant to the Code of Virginia, Section 2.2 - 4343.1, be advised that the City of Roanoke does not discriminate against faith-based organizations.

**ARTICLE 11. COMPLIANCE WITH FEDERAL IMMIGRATION LAW:** Contractor agrees that Contractor does not, and shall not during the performance of this Contract, knowingly employ an unauthorized alien as defined in the federal Immigration Reform and Control Act of 1986.

**ARTICLE 12. COMPLIANCE WITH STATE LAW, FOREIGN AND DOMESTIC BUSINESSES AUTHORIZED TO TRANSACT BUSINESS IN THE COMMONWEALTH OF VIRGINIA:** Contractor shall comply with the provisions of Virginia Code Section 2.2-4311.2, as amended, which provides that a contractor organized as a stock or nonstock corporation, limited liability company, business trust, or limited partnership or registered as a registered limited liability partnership shall be authorized to transact business in the Commonwealth as a domestic or foreign business entity if so required by Title 13.1 or Title 50 or as otherwise required by law. Contractor shall not allow its existence to lapse or its certificate of authority or registration to transact business in the Commonwealth, if so required under Title 13.1 or Title 50, to be revoked or cancelled at any time during the term of the Contract. The City may void the Contract if the Contractor fails to remain in compliance with the provisions of this section.

**ARTICLE 13. CONTRACT SUBJECT TO FUNDING:** This Contract is subject to funding and/or appropriations from federal, state, and/or local governments and/or agencies. If any such funding is not provided, withdrawn, or otherwise not made available for this Contract, the Contractor agrees that the City may terminate this Contract on seven (7) days written notice to Contractor, without any penalty or damages being incurred by the City. Contractor further agrees to comply with any applicable requirements of any grants and/or agreements providing such funding.

**ARTICLE 14. NOTICES:** All notices must be given in writing and shall be validly given if sent by certified mail, return receipt requested, or by a nationally recognized overnight courier, with a receipt, addressed as follows (or any other address that the party to be notified may have designated to the sender by like notice):



To City: City of Roanoke  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Facsimile: Roanoke, Virginia 24011  
(540) 853-XXXX

Copy to: City of Roanoke  
Purchasing Division  
Attn: Purchasing Manager  
Noel C. Taylor Municipal Building, Room 202  
215 Church Avenue, SW  
Roanoke, Virginia 24011

Facsimile: (540) 853-1513

If to Contractor: \_\_\_\_\_  
Attn: \_\_\_\_\_, President/CEO  
\_\_\_\_\_  
\_\_\_\_\_  
Facsimile: \_\_\_\_\_

Notices shall be deemed to be effective one day after sending if sent by overnight courier or three (3) days after sending it by certified mail, return receipt requested.

**ARTICLE 15.**      **ENTIRE CONTRACT:** This Contract is an entire and integrated contract and is not severable, except as set forth in Article 8, and may be modified only by written agreement properly executed by the parties.

**SIGNATURE PAGE WILL FOLLOW**

IN WITNESS WHEREOF, the parties hereto have signed this Contract by their authorized representatives.

Witness:

\_\_\_\_\_  
Typed Name of Contractor

Owner

By \_\_\_\_\_  
President/Vice-President; Partner or

\_\_\_\_\_  
Typed or Printed Name and Title

\_\_\_\_\_  
Typed or Printed Name and Title

(Contractor's Corporate Seal)

Witness:

CITY OF ROANOKE, VIRGINIA

By \_\_\_\_\_

\_\_\_\_\_  
Typed or Printed Name and Title

\_\_\_\_\_  
Typed or Printed Name and Title

Appropriation and Funds Required  
for this Contract Certified

\_\_\_\_\_  
Director/Deputy Director of Finance

Date: \_\_\_\_\_

Account #: \_\_\_\_\_

CT#: \_\_\_\_\_

Approved as to form:

Approved as to execution:

\_\_\_\_\_  
City Attorney/Assistant City Attorney

\_\_\_\_\_  
City Attorney/Assistant City Attorney

**CITY OF ROANOKE, VIRGINIA**

**CONTRACTOR'S PERFORMANCE BOND**

KNOW ALL MEN BY THESE PRESENTS:

that \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
(Insert full name or legal title and address of Contractor)

as Principal, (hereinafter referred to as "Contractor"),

and \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
(Insert full name or legal title and address of Surety)

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

as Surety (hereinafter referred to as "Surety"), are held and firmly bound unto the City of Roanoke, Virginia, a municipal corporation, 215 Church Avenue, S.W., Noel C. Taylor Municipal Building, Room 350, Roanoke, Virginia 24011, as Obligee (hereinafter referred to as "City" or "Owner"), in the amount of \_

Dollars (\$\_\_\_\_\_), for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents to the terms of this bond.

WHEREAS, Contractor has entered into a Contract with the City dated \_\_\_\_\_, 20\_\_\_\_, incorporating certain specifications and drawings prepared by:

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
(Insert full name or legal title and address)

(which Contract, specifications, drawings, and other Contract Documents are hereinafter referred to collectively as the "Contract") for a fully functional and properly operating project, namely \_\_\_\_\_

\_\_\_\_\_,  
all in a proper and timely manner and in accordance with the Contract Documents, which Contract is expressly incorporated herein by reference and made a part of this bond.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if the Contractor shall promptly and faithfully perform the Contract, in strict conformity with each and every requirement of the Contract, then this obligation shall be null and void; otherwise, this Performance Bond shall remain in full force and effect and is subject to the following conditions:

- a. Any alteration which may be made in the terms of the Contract, including, without limitation, the amount to be paid or the work to be done under it, or the giving by the City of any extension of time for the performance of the Contract or any other forbearance of any nature whatsoever on the part of either the City or the Contractor to the other shall not in any way release the Contractor and the Surety, or either of them, their heirs, executors, administrators, successors, or assigns from their liability hereunder, and notice of such alteration, extension, or forbearance is hereby expressly waived by Surety.
- b. IT IS NOT INTENDED BY ANY OF THE PROVISIONS OF ANY PART OF THIS BOND TO CONFER A BENEFIT UPON ANY OTHER PERSON OR ENTITY NOT A PARTY TO THIS PERFORMANCE BOND OR TO AUTHORIZE ANY PERSON OR ENTITY NOT A PARTY TO THIS BOND TO MAINTAIN A SUIT PURSUANT TO THE TERMS OR PROVISIONS OF THIS BOND OTHER THAN THE CITY OR ITS SUCCESSORS OR ASSIGNS.
- c. The Surety hereby submits itself to a court of competent jurisdiction in Roanoke, Virginia, and agrees that any suit or action hereunder shall be brought only in a Virginia court of competent jurisdiction in the City of Roanoke or in the United States District Court for the Western District of Virginia, Roanoke Division, and not elsewhere.
- d. Any suit under this bond must be instituted within two (2) years after (i) completion of the Contract, including the expiration of all warranties and guarantees, or (ii) discovery of the defect or breach of warranty, if the action be for such, in all other cases.
- e. The provisions of this bond shall be governed by and interpreted to be consistent with the laws of the Commonwealth of Virginia.

SIGNED AND SEALED this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, in the presence of:

WITNESS:

\_\_\_\_\_  
CONTRACTOR

By: \_\_\_\_\_ (Seal)

\_\_\_\_\_  
(Type Name and Title)

WITNESS:

\_\_\_\_\_  
SURETY

By: \_\_\_\_\_ (Seal)

Attorney-in-Fact

\_\_\_\_\_  
(Type Name and Title)

(Attorneys-in-fact affix seal and attach original or certified copy of current power of attorney.)

**CITY OF ROANOKE, VIRGINIA**

**CONTRACTOR'S LABOR AND MATERIAL PAYMENT BOND**

KNOW ALL MEN BY THESE PRESENTS:

that \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
(Insert full name or legal title and address of Contractor)

as Principal, (hereinafter referred to as "Contractor"),

and \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
(Insert full name or legal title and address of Surety)

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

as Surety (hereinafter referred to as "Surety"), are held and firmly bound unto the City of Roanoke, Virginia, a municipal corporation, 215 Church Avenue, S.W., Noel C. Taylor Municipal Building, Room 350, Roanoke, Virginia 24011, as Obligee (hereinafter referred to as "City" or "Owner"), for the use and benefit of Claimants as herein below defined, in the amount of \_\_\_\_\_

\_\_\_\_\_  
Dollars (\$ \_\_\_\_\_), for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents to the terms of this bond.

WHEREAS, Contractor has entered into a Contract with the City dated \_\_\_\_\_,  
20\_\_\_\_\_, incorporating certain specifications and drawings prepared by:

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
(Insert full name or legal title and address)

(which Contract, specifications, drawings, and other Contract Documents are hereinafter referred to collectively as the "Contract") for providing a fully functional and properly operating project, namely \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_.

all in a proper and timely manner and in accordance with the Contract Documents, which Contract is expressly incorporated herein by reference and made a part of this bond.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if the Contractor shall promptly make payment to all Claimants, as hereinafter defined, for all material furnished or labor supplied or performed in the prosecution of the work provided for in the Contract, then this obligation shall be void; otherwise this Labor and Material Payment Bond shall remain in full force and effect and is subject to the following conditions:

a. Any alteration which may be made in the terms of the Contract, including, without limitation, the amount to be paid or the work to be done under it, or the giving by the City of any extension of time for the performance of the Contract or any other forbearance of any nature whatsoever on the part of either the City or the Contractor to the other shall not in any way release the Contractor and the Surety, or either of them, their heirs, executors, administrators, successors, or assigns from their liability hereunder, and notice of such alteration, extension, or forbearance is hereby expressly waived by Surety.

b. A Claimant is defined as one who has and fulfills a contract to supply labor or materials, or both, to the Contractor or to any of the Contractor's subcontractors, in the prosecution of work provided for in the Contract, labor and material being construed to include, without limitation, public utility services and reasonable rentals of equipment, but only for periods when the equipment rented is actually used at the site, or who may otherwise be allowed by law to file a claim against the Contractor and/or Surety.

c. The Contractor and Surety hereby jointly and severally agree with City that every Claimant, as defined in paragraph b, **who has a direct contractual relationship with the Contractor and** who has performed labor or furnished material in accordance with the Contract in the prosecution of the work provided for in the Contract and who has not been paid in full therefore before the expiration of ninety (90) days after the day on which such Claimant performed the last such labor or furnished the last of such materials for which Claimant claims payment, or as may otherwise be allowed by law, may bring an action on this payment bond to recover any amount due Claimant for such labor or material, and may prosecute such action to final judgment and have execution on the judgment. The Contractor and Surety expressly agree that City shall not be liable for the payment of any judgment, costs, or expenses resulting from any such suit and that neither Contractor nor Surety shall cause City to be named as a party in any such suit.

d. The Contractor and Surety hereby jointly and severally agree with City that every Claimant, as defined in paragraph b, who has direct contractual relationship with any subcontractor, but who has no contractual relationship, express or implied, with such Contractor, may bring an action on this bond only if the Claimant has given written notice to the Contractor within **ninety (90)** days from the day on which the Claimant performed the last of the labor or furnished the last of the materials for which payment is claimed, stating with substantial accuracy the amount claimed and the name of the person for whom the work was performed or to whom the material was furnished, or as may otherwise be allowed by law. **Notice to the Contractor shall be given as set forth in Virginia Code §2.2-4341 and Claimants are advised to review such Code Section.** The Contractor and Surety expressly agree that City shall not be liable for the payment of any judgment, costs, or expenses resulting from any such suit and that neither Contractor nor Surety shall cause City to be named as a party in any such suit.

e. The Surety hereby submits itself to a court of competent jurisdiction in Roanoke, Virginia, and agrees that any suit or action hereunder by any Claimant shall be brought only in a Virginia court of competent jurisdiction in and for the City of Roanoke, or in the United States District Court for the Western District of Virginia, Roanoke Division, and not elsewhere.

f. Any suit or action hereunder shall be brought within one year after the day on which the person bringing such action last performed labor or last furnished or supplied materials.

g. The provisions of this bond shall be governed by and interpreted to be consistent with the laws of the Commonwealth of Virginia, including, but not limited to Virginia Code §2.2-4341.

SIGNED AND SEALED this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, in the presence of:

WITNESS:

\_\_\_\_\_  
CONTRACTOR

By: \_\_\_\_\_ (Seal)

\_\_\_\_\_  
(Type Name and Title)

\_\_\_\_\_  
SURETY

WITNESS:

By: \_\_\_\_\_ (Seal)

Attorney-In-Fact

\_\_\_\_\_  
(Type Name and Title)

(Attorneys-in-fact affix seal and attach current original or certified copy of power of attorney.)

**CITY OF ROANOKE, VIRGINIA**

**CERTIFICATE OF SUBSTANTIAL COMPLETION**

The Date of Substantial Completion of the Work or designated portion thereof is the Date certified by the Project Manager when construction is sufficiently complete, in accordance with the Contract Documents, so the City of Roanoke, Virginia (City or Owner) can occupy or utilize the Work or designated portion thereof for the use for which it is intended, as expressed in the Contract Documents.

PROJECT MANAGER: \_\_\_\_\_

BID NUMBER: \_\_\_\_\_ DATE OF ISSUANCE: \_\_\_\_\_

PROJECT: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_

PROJECT OR DESIGNATED PORTION SHALL INCLUDE: \_\_\_\_\_

\_\_\_\_\_  
The Work or portion thereof designated above performed under this Contract has been reviewed and found to be substantially complete. The Date of Substantial Completion of the Project or portion thereof designated above is hereby established as \_\_\_\_\_.  
The City will assume possession thereof at \_\_\_\_\_ a.m./p.m. on that date.

A list of items ("punch list"), prepared by the Project Manager, to be completed or corrected by the Contractor, is attached hereto. The failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. The Contractor will complete any portion of the Work that is not substantially complete and will complete or correct the work on the punch list in accordance with the Contract Documents.

The establishment of a date of substantial completion and/or the acceptance of the Work or designated portion thereof does not relieve the Contractor of any responsibility for any faulty materials or workmanship or operate to relieve the Contractor or its Surety from any obligation under the Contract with the City or the Performance Bond or Labor and Material Payment Bond.

This Certificate is subject to the terms and conditions of the Contract Documents, including but not limited to Section 20.8 of the General Conditions.

_____ Project Manager	_____ By	_____ Date
_____ Contractor	_____ By	_____ Date
_____ Director of Parks and Recreation	_____ By	_____ Date



**CITY OF ROANOKE, VIRGINIA**  
**AFFIDAVIT OF PAYMENT OF CLAIMS**

By: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

(Insert Exact Name and Address of Firm)

This day \_\_\_\_\_ personally appeared before me,  
\_\_\_\_\_, a Notary Public in and for the City (County) of  
\_\_\_\_\_, and, being by me first duly sworn states that all  
subcontractors and suppliers of labor and materials have been paid all sums due them  
for work performed or materials furnished in the performance of the Contract between  
the City of Roanoke, Virginia, and \_\_\_\_\_  
\_\_\_\_\_, Contractor, dated \_\_\_\_\_, 20\_\_\_\_, for

\_\_\_\_\_

or arrangements have been made by the Contractor satisfactory to such subcontractors  
and suppliers with respect to the payment of such sums as may be due from the  
Contractor to the subcontractors and suppliers.

CONTRACTOR: \_\_\_\_\_

BY: \_\_\_\_\_

PRINTED OR TYPED NAME AND TITLE: \_\_\_\_\_

Commonwealth of Virginia at Large:

Subscribed and sworn to before me this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

My commission expires on the \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

\_\_\_\_\_  
Notary Public

\_\_\_\_\_  
Printed Name of Notary Public

**CITY OF ROANOKE, VIRGINIA**

**CERTIFICATE OF FINAL ACCEPTANCE**

This Certificate is subject to the terms and conditions of the Contract Documents, including but not limited to Section 20.8 of the General Conditions. The City, Contractor, and Project Manager, if applicable, hereby agree that the date fixed for Final Acceptance of the Work by the City is \_\_\_\_\_.

The establishment of a date of Final Acceptance and/or the acceptance of the Work does not relieve the Contractor of any responsibility for any faulty materials or workmanship or operate to relieve the Contractor or its Surety from any obligation under the Contract with the City or the Performance Bond or Labor and Material Payment Bond.

PROJECT MANAGER: \_\_\_\_\_

PROJECT NUMBER: \_\_\_\_\_

PROJECT: \_\_\_\_\_

\_\_\_\_\_

CONTRACTOR: \_\_\_\_\_

_____	_____	_____
Project Manager	By	Date

_____	_____	_____
Contractor	By	Date

Director of Parks and Recreation	_____	_____
	By	Date

**CITY OF ROANOKE, VIRGINIA**  
**GENERAL CONDITIONS**

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## **CITY OF ROANOKE, VIRGINIA**

### **GENERAL CONDITIONS**

#### **SECTION 1. DEFINITIONS**

Whenever used in these General Conditions or in the Contract Documents, the following terms have the meanings indicated, which are applicable to both the singular and plural and the male and female gender thereof, and where applicable to any other legal entity such as a corporation, partnership, limited liability company, etc.

The section and paragraph headings are inserted for convenience only.

**Architect, Engineer, Architect/Engineer or A/E**: The term used to designate the Architect and/or the Engineer who contracts with the City to provide the Architectural and Engineering services for the project. The Architect/Engineer is a separate Contractor and is referred to herein as the Architect/Engineer or abbreviated as A/E. The term includes any associates or consultants employed by the firm to assist in providing the A/E services.

**Bidder**: The person, firm, corporation, or other entity interested in submitting a bid for the Work to be performed.

**Change Order**: A document issued by Director of Parks and Recreation on or after the effective date of the Contract which is agreed to by the Contractor and approved by the City, and which authorizes an addition, deletion, or revision in the Work, including any adjustment in the Contract Price and/or the Contract Time.

**City or Owner**: The City of Roanoke, Virginia, or its authorized representative.

**City Code**: Refers to the Code of the City of Roanoke (1979), as amended.

**Director of Parks and Recreation**: Director of Parks and Recreation or his authorized representative.

**City Manager**: The City Manager or his authorized representative.

**Code of Virginia**: Refers to the Code of Virginia (1950), as amended. (Sometimes referred to as Va. Code or Virginia Code.)

**Contract Documents**: These documents include, but are not limited to, the Project Manual, Invitation to Bid, the Instructions to Bidders, the Bid Form, the Contract, the Bonds or other Bid Security, the Escrow Agreement, the General Conditions, Supplementary General Conditions, Special Conditions, the Specifications, Addenda or Change Orders, the Plans and Drawings, any Supplemental Drawings, and any additional documents incorporated by reference in the above.

**Contract:** The written agreement between the parties concerning the performance of the Work and consisting of the Contract Documents.

**Contractor:** The person, firm, corporation, or other entity entering into a contractual agreement with the City to perform the Work.

**Defect, Defective, or Deficient:** An adjective or noun which when modifying or referring to the word Work refers to Work or any part thereof that is unsatisfactory, faulty, or does not conform to the Contract Documents, or does not meet the requirements of any inspections, standards, tests, or approvals referred to in the Contract Documents.

**Document(s):** This term includes, but is not limited to: writings, drawings, items on which words, symbols, or marks are recorded; electronic data of any type; videotapes, recordings, photographs and negatives, digital or otherwise; and any other form of data, writing, or information compilation, however recorded or stored, and regardless of physical form or characteristics.

**Field Order:** A written order issued by Director of Parks and Recreation which clarifies the requirements of the Contract by giving a more complete expression of the drawings or specifications or other documents without any change in the design, the Contract price, or the Contract time.

**Final Acceptance:** The City's acceptance of the project from the Contractor upon confirmation from Director of Parks and Recreation and the Contractor that the project is apparently complete in accordance with the Contract requirements.

**Notice:** All written notices, demands, instructions, claims, approvals, and disapprovals required to obtain compliance with the Contract requirements. Any written notice by either party to the Contract shall be sufficiently given if delivered to or at the last known business address of the person, firm, or corporation constituting the party to the Contract, or to his, her, their, or its authorized agent, representative, or officer.

**Notice to Proceed:** A written notice given by the City at the City's discretion to the Contractor fixing the date on which the Contract time will commence for the Contractor to begin the prosecution of the Work in accordance with the requirements of the Contract Documents.

**Project Inspector:** One or more individuals employed by the City to inspect the Work and/or to act as Resident Inspector to the extent required by the City. The City shall notify the Contractor of the appointment of such Project Inspector(s).

**Provide:** Shall mean to furnish and install ready for its intended use.

**Subcontractor:** A person, firm, partnership, corporation, or other entity having a direct contract with the Contractor or with any other Subcontractor for the performance of the Work. It includes one who provides on-site labor, but does not include one who only furnishes or supplies material for the project.

**Submittals:** All drawings, diagrams, illustrations, brochures, schedules, samples, electronic data and other data required by the Contract Documents which are specifically prepared by or for the Contractor, Subcontractor, or Supplier, and submitted by the Contractor to illustrate the material, equipment, or layouts, or some other portion of the Work.

**Substantial Completion:** The date certified by Director of Parks and Recreation when construction is sufficiently complete, in accordance with the Contract Documents, so the City can occupy or utilize the Work or designated portion thereof for the purposes for which it is intended.

**Successful Bidder:** The bidder to whom the City makes an award.

**Supplier:** A manufacturer, fabricator, distributor, material man, or vendor who provides only material or supplies for the project, but does not provide on-site labor.

**Work or Project:** The entire completed construction or the various separately identifiable parts thereof as required by the Contract Documents. Work is the result of performing services, furnishing labor, and furnishing and incorporating material and equipment into the construction.

## **SECTION 2. INDEMNITY PROVISION**

**2.1 Indemnity:** Contractor shall indemnify and hold harmless City and its officers, agents, and employees against any and all liability, losses, damages, claims, causes of action, suits of any nature, costs, and expenses, including reasonable attorney's fees, resulting from or arising out of Contractor's or its employees, agents, or subcontractors actions, activities, or omissions, negligent or otherwise, on or near City's property or easement or arising in any way out of or resulting from any of the work to be provided under this Contract, and this includes, without limitation, any fines or penalties, violations of federal, state, or local laws or regulations, personal injury, wrongful death, or property damage claims or suits, breach of contract claims, indemnity claims, and any other damages, losses, and/or claims of any type.

**2.2 Hazardous Material:** While on City's property or easement and in its performance of this Contract, Contractor shall not transport, dispose of or release any hazardous substance, material, or waste, except as necessary in performance of its Work under this Contract and in any event Contractor shall comply with all federal, state, and local laws, rules, regulations, and ordinances controlling air, water, noise, solid wastes, and other pollution, and relating to the storage, transport, release, or disposal of hazardous material, substances or waste. Regardless of City's acquiescence, Contractor shall indemnify and hold City, its officers, agents, and employees harmless from all costs, claims, damages, causes of action, liabilities, fines or penalties, including reasonable attorney's fees, resulting from Contractor's violation of this paragraph and agrees to reimburse City for all costs and expenses incurred by City in eliminating or remedying such violations. Contractor also agrees to reimburse City and hold City, its officers, agents, and employees harmless from any and all costs,

expenses, attorney's fees and all penalties or civil judgments obtained against the City as a result of Contractor's use or release of any hazardous substance or waste onto the ground, or into the water or air from or upon City's premises. (See also Section 13.2 of these General Conditions.)

**2.3 Patents:** The Contractor shall protect, indemnify, and hold harmless the City from any and all demands for fees, claims, suits, actions, causes of action, or judgments based on the alleged infringement or violation of any patent, invention, article, trademark, arrangement, or other apparatus that may be used in the performance of the Contract or the Work.

### **SECTION 3. LAWS, REGULATIONS, PERMITS, AND IMMIGRATION LAW**

**3.1 Regulations:** The Contractor shall fully comply with all local, state, and federal ordinances, laws, and regulations, including without limitation all applicable building and fire code sections of the Occupational Safety and Health Act (OSHA), and the Virginia Uniform Statewide Building Code, and obtain all required licenses and permits, including business license, building permits, and pay all charges and expenses connected therewith. Contractor further agrees that Contractor does not, and shall not during the performance of this Contract; knowingly employ an unauthorized alien as defined in the federal Immigration Reform and Control Act of 1986.

**3.2 Permits:** The Contractor shall, at its sole cost, obtain all required permits from the appropriate authorities, including the City of Roanoke. This includes, but is not limited to, all permits for any excavations in any public right-of-way. No delay or extension of time or any claim for additional compensation of any type shall be granted for failure to obtain any required permits.

**3.3 Litter:** In accordance with the Virginia Anti-Litter Law, receptacles sufficient to contain workmen's litter and construction wastes capable of being spread by wind or water shall be located on the construction site. The number and size of receptacles required shall be determined by the Contractor.

**3.4 Asbestos License:** The Contractor, if not licensed as an asbestos abatement contractor or a Roofing, Flooring, and Siding (RFS) contractor in accordance with Section 54.1-514, of the Code of Virginia, shall have all asbestos related work performed by subcontractors who are duly licensed as asbestos contractors or RFS contractors as appropriate for the work required.

### **SECTION 4. CONTRACTOR'S AND SUBCONTRACTOR'S INSURANCE**

Neither the Contractor nor any subcontractor shall commence work under this Contract until the Contractor has obtained and provided proof of the required insurance under this Section to the City. The Contractor confirms that all subcontractors have provided the Contractor with proof of insurance. Contractor further warrants that proof of coverage as provided to the City responds on a primary basis in the event of an



uninsured or underinsured subcontractor. All such insurance shall be primary and non-contributory to any insurance or self-insurance the City may have in force.

**4.1 For All Contracts,** the following minimum insurance requirements apply:

**a. Workers' Compensation and Employers' Liability:**

The Contractor shall obtain and maintain the following limits:

Workers' Compensation: Statutory

Employers' Liability: \$100,000 bodily injury by accident each occurrence

\$500,000 bodily injury by disease (policy limit)

\$100,000 bodily injury by disease each employee

**b. Commercial General Liability:**

Coverage is to be written on an "occurrence" basis and such coverage shall include broad form extension endorsements for both liability and property damage.

Completed Operations coverage will be required to be maintained for the life of the Contract.

For Limits of Liability see Sections 4.2 and 4.3 of these General Conditions.

**c. Automobile Liability:**

Limits for vehicles owned, non-owned, hired or borrowed shall not be less than:

- \$1,000,000 Bodily Injury and Property Damage combined single limit per occurrence.

**d. Additional Insurance Requirements:**

Additional specific insurance coverage minimum requirements to be provided by Contractor may include the following as detailed in the Supplemental General Conditions:

- 1) Builders Risk: At the discretion of the City, the Contractor, at its cost, shall obtain and maintain in the names of the City and the Contractor "all-risk" builders risk insurance (if approved by the City) upon the entire structure or structures on which the Work of this Contract is to be done and upon all material in or adjacent thereto or those that are "off-site" but which are intended for use thereon, to one hundred percent (100%) of the completed value thereof.

- 2) Property Coverage: Installation Floater (and Rigger's Form, if applicable) will be required for the installation of contents or equipment; coverage will begin with supplier and continue until equipment/contents have been fully installed. Floater will be valued for the replacement cost value of equipment/contents including all costs. The Contractor shall provide coverage for portions of the work stored off-site after written approval of the City at the value established in the approval and for portions of the work in transit.
- 3) Special Hazards: In the event special hazards are evident in the work contemplated, or if required by the Contract Documents, the Contractor shall obtain and maintain during the life of the Contract a rider to the policy or policies required, in an amount not less than that stipulated under the above Paragraphs. Should any unexpected special hazards be encountered during the performance of this Contract, the Contractor shall, prior to performing any work involving the special hazard, immediately obtain this insurance as instructed by the City. In the event the special hazard requiring the additional coverage was not a part of the original bid, the expense of such insurance shall be reimbursed to the Contractor by the City, otherwise the Contractor shall assume full responsibility for the purchase with no charge back to the City.
- 4) Deductible: Deductible/self-insured retention amounts shall be reduced or eliminated upon written request from City. The insurer's cost of defense (and appeal), including attorney's fees, shall not be included within the coverages provided but shall remain the insurer's responsibility.
- 5) Term: Insurance shall remain in effect until final payment and at all times thereafter when Contractor may be correcting, removing, or replacing defective work.
- 6) Limit of Liability: Nothing contained in these insurance requirements is to be construed as limiting the liability of Contractor or Contractor's insurance carriers. City does not in any way represent that the coverage's or the limits of insurance specified is sufficient or adequate to protect Contractor's interests or liabilities, but are merely minimums. The obligation of the Contractor to purchase insurance herein shall not in any way limit the obligation of the Contractor in any event and/or in the event that the City should suffer an injury or loss in excess of the amount recoverable through insurance.

**4.2 Contracts of \$100,000 or More:** The following minimum insurance requirements apply in addition to the above requirements:

- a. Limits of Liability: For the Commercial General Liability policy:
  - \$2,000,000 general aggregate

- \$1,000,000 products/completed operations aggregate
- \$1,000,000 personal and advertising injury
- \$1,000,000 each occurrence

Coverage is to be written on an "occurrence" and "per project" basis and such coverage shall include:

**b. Umbrella Liability Insurance:**

This coverage shall be written for minimum limit of:

- \$5,000,000 each occurrence for Personal and Bodily Injury and Property Damage

This Policy shall apply in excess and follow form of employer's liability, commercial general liability, and auto liability.

**4.3 Contracts Less Than \$100,000:** The following minimum insurance limits apply unless specified otherwise in the Supplemental General Conditions:

**a. Limits of Liability:** For the Commercial General Liability policy:

- \$1,000,000 general aggregate
- \$1,000,000 products/completed operations aggregate
- \$1,000,000 personal and advertising injury
- \$1,000,000 each occurrence

**4.4 Proof of Insurance Coverage:** The policies of insurance required by Sections 4.1, 4.2, or 4.3 shall be purchased from a reputable insurer licensed to do business in Virginia and maintained for the life of the Contract by the Contractor. Other insurance requirements include the following:

- a.** The Contractor shall furnish the City with the required certificates of insurance showing the insurer, type of insurance, policy number, policy term, deductible, and the amount insured for property coverage's and the limits for liability coverage's.
- b.** The Contractor shall notify Director of Parks and Recreation and Risk Manager in writing within thirty (30) consecutive calendar days if any of the insurance coverage's or policies are cancelled or materially altered and Contractor shall immediately replace such policies and provide documentation of such to Director of Parks and Recreation and Risk Manager.
- c.** The required insurance policies and coverages, excluding those for Workers Compensation and Professional Liability, shall name the City of Roanoke, its officers, agents, volunteers and employees as additional

insured's and the certificate of insurance shall show if the policies provide such coverage. Waiver of subrogation is required with respect to any policy of workers' compensation and employers' liability insurance required under this Section. The certificate of insurance shall show if the policies provide such waiver. Additional insured and waiver endorsements shall be received by the City's Risk Manager from the insurer with the certificate of insurance unless the City's Risk Manager agrees to another process. The City's Risk Manager may approve other documentation of such insurance coverages.

- d. Insurance coverage shall be in a form and with an insurance company approved by the City which approval shall not be unreasonably withheld. Any insurance company providing coverage under this Contract shall be authorized to do business in the Commonwealth of Virginia.

## **SECTION 5. EMPLOYMENT AND CONDUCT OF PERSONNEL**

**5.1 City Residents:** Pursuant to the provisions of Resolution Number 10610 of the Roanoke City Council it is required that in the employment of labor, on work performed for the City, that the Contractor shall give preference to residents of the City and give secondary preference to residents of the area within a radius of fifty (50) miles of the City, when such labor is available.

**5.2 Employee Qualifications:** Only skilled and reliable workers shall be employed for the Work. Should any person employed on the Work by the Contractor appear to Director of Parks and Recreation to be incompetent, unable to perform the Work, or disorderly, such person shall be removed from the Work immediately upon proper notice to the Contractor from Director of Parks and Recreation and such person shall not again be used for this Contract.

**5.3 Superintendence:** The Contractor shall have a competent foreman or superintendent, satisfactory to Director of Parks and Recreation, on the jobsite at all times during the progress of the Work. The Contractor shall notify the City, in writing, of any proposed change in the foreman or superintendent including the reason therefore prior to making such change.

**5.4 Drug-free Workplace:** During the performance of this Contract, the Contractor agrees to (i) provide a drug-free workplace for the Contractor's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of the Contractor that the Contractor maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

For the purpose of this section, "drug-free workplace" means a site for the performance of work done in connection with a specific contract awarded to a Contractor, the employees of who are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the Contract.

The Contractor shall post a copy of the policy in a conspicuous place at the jobsite and assure that all Contractor, subcontractor, and supplier personnel entering the jobsite are informed of the policy.

## **SECTION 6. EMPLOYMENT DISCRIMINATION BY CONTRACTOR PROHIBITED**

Every Contract of over \$10,000 to which the City is a party shall contain the provisions in Sections 6.1 and 6.2 herein:

**6.1 Nondiscrimination:** During the performance of this Contract, the Contractor agrees as follows:

- a. The Contractor will not discriminate against any Subcontractor, employee, or applicant for employment because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by State law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the Contractor. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
- b. The Contractor, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, will state that such Contractor is an equal employment opportunity employer.
- c. Notices, advertisements, and solicitations placed in accordance with federal law, rule, or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.

**6.2 Nondiscrimination by Subcontractor or Vendor:** The Contractor will include the provisions of the foregoing Subsections 6.1 (a), (b), and (c) in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

## **SECTION 7. SUBCONTRACTORS**

**7.1 Licensure:** The Contractor shall comply with Title 54.1, Chapter 11, of the Code of Virginia, with respect to licensure of itself and all subcontractors employed to work on the project. The Contractor represents that it has verified that all subcontractors hold all required state and local licenses, including State Contractor's license and City business license. The Contractor shall verify that any additional subcontractors employed to work on the project, subsequent to the initial verification, hold all required state and local licenses, including State

Contractor's license and City business license. The Contractor is required to submit the Contractor's Certification as to Licensure of Subcontractors Form to Director of Parks and Recreation. This constitutes a material part of the Contractor's Contract with the City.

**7.2 Change of Subcontractors:** Subcontractors shall not be changed without the written approval of Director of Parks and Recreation.

**7.3 Responsibility for Subcontractors:** The Contractor shall not employ for the project any subcontractor that the City may, within a reasonable time, object to as unsuitable. The Contractor further agrees that it is as fully responsible to the City for the acts and omissions of its subcontractors, suppliers, and invitees on the jobsite and of persons either directly or indirectly employed by them, as the Contractor is for the acts and omissions of persons directly employed by it.

## **SECTION 8. CONDITIONS AT SITE**

**8.1 Existing Conditions:** The Contractor shall have visited the site prior to bidding and is responsible for having ascertained pertinent local conditions such as location, accessibility, and general character of the site, and the character and extent of existing improvements and work within or adjacent to the site. Claims as a result of failure to have done so will not be considered by the City and will be the sole responsibility of the Contractor.

**8.2 Hidden Conditions:** If, in the performance of the Contract, hidden physical conditions of a building being modified are exposed revealing unusual or materially different conditions than those ordinarily encountered or inherent in work of this nature, or if subsurface or latent conditions at the site are found which are materially different from those frequently present in the locality, from those indicated in the Contract Documents, or from those inherent in work of the character required by the Contract, the Contractor must report such conditions to Director of Parks and Recreation before the conditions are disturbed. Upon such notice, or upon his own observation of such conditions, Director of Parks and Recreation will make such changes in the Contract Documents as he finds necessary to conform to the different conditions. Any change in the cost of the Work or the time needed for completion must be requested pursuant to Section 19 of these General Conditions.

**8.3 Suspected Hazardous Material:** If the Contractor, during the course of the project, observes the existence of any material which it suspects or knows to be hazardous to human health or the environment, the Contractor shall promptly notify Director of Parks and Recreation. Director of Parks and Recreation will provide the Contractor with instructions regarding the situation. The Contractor shall not perform any work involving the material or any work causing the material to be less accessible prior to receipt of special instructions from Director of Parks and Recreation.

## **SECTION 9. SURVEYS AND LAYOUT**

- 9.1 Surveying Services:** All necessary drawings showing the location of property lines, buildings, and other appropriate information shall be furnished to the Contractor through the drawings and specifications. The Contractor shall provide competent surveying and engineering services to verify the given information and to execute the Work in accordance with the Contract requirements and shall be responsible for the accuracy of Contractor's surveying and engineering services. The Contractor shall immediately notify Director of Parks and Recreation of any discrepancies and confirm such notice in writing within five (5) calendar days.
- 9.2 Survey Control:** Such general reference points and bench marks on the building site as will enable the Contractor to proceed with the Work will be established in the drawings and specifications. If the Contractor finds that any previously established reference points have been lost or destroyed, Contractor shall promptly notify Director of Parks and Recreation.
- 9.3 Damage to Survey Control:** The Contractor shall protect and preserve the established bench marks and monuments and shall make no changes in locations without written notice to and approval from Director of Parks and Recreation. Any of these which may be lost or destroyed or which require shifting because of necessary changes in grades or locations shall, subject to prior approval from Director of Parks and Recreation, be replaced and accurately located by the Contractor.

## **SECTION 10. DRAWINGS AND SPECIFICATIONS**

- 10.1 Drawings and Specifications:** The general character and scope of the Work are illustrated by the drawings and specifications. Where on any of the drawings a portion of the Work is drawn out and the remainder is indicated in outline, the parts drawn out shall apply also to all other like portions of the Work. If the Contractor deems additional detail or information to be needed, Contractor may request the same in writing from Director of Parks and Recreation. The Contractor shall carry out the Work in accordance with the drawings and specifications and any additional detail drawings and instructions as issued by Director of Parks and Recreation. However, Contractor shall immediately notify Director of Parks and Recreation of any discrepancies in such drawings and/or specifications and confirm such notice in writing within five (5) calendar days.
- 10.2 Discrepancies in Drawings:** In case of difference between small and large scale drawings, the large scale drawings shall govern, unless otherwise directed in writing by Director of Parks and Recreation.
- 10.3 "Similar":** Where the word "similar" appears on the drawings, it shall be interpreted in its general sense and not as meaning identical, and all details shall be worked out in relation to their location and their connection with other parts of the Work.

- 10.4 Division of Specifications:** The specifications are divided into several parts for convenience only, since the entire specifications must be considered as a whole. The divisions of the specifications are not intended to control the Contractor in dividing the work among subcontractors or to limit the work performed by any trade. The Contractor shall be responsible for the coordination of the trades, subcontractors, and vendors engaged upon this Work.
- 10.5 Dimension Accuracy:** Measurements or dimensions shown on the drawings for site features, utilities, and structures shall be verified at the site by the Contractor. The location of underground utilities indicated on the plans is diagrammatic and were plotted from available records and field survey information and shall be considered approximate only, and the City makes no representations with regard to their accuracy. The Contractor shall not scale measurements or dimensions from the drawings. Where there are discrepancies, Director of Parks and Recreation shall be consulted. Where new work is to connect to, match with, or be provided for existing work, the Contractor shall verify the actual existing conditions and related dimensions prior to ordering or fabrication, so that such new work will properly fit with existing work.
- 10.6 As-Built Drawings:** The Contractor shall maintain at the site for the City one copy of all drawings, specifications, addenda, approved shop or setting drawings, change orders, field deviations, and other documents or modifications (referred to herein as "As-Built Drawings") in good order and marked to record all changes as they occur during construction. These shall be available to Director of Parks and Recreation, the Project Inspector, and the City's testing personnel. These "As-Built Drawings" shall be neatly and clearly marked in color during construction to record all variations from the drawings made during construction. The representation of such variations shall include such supplementary notes, symbols, legends, documents, and details as may be necessary to clearly show the as-built construction.
- 10.7 Record Drawings:** Upon completion of the Work and prior to Final Acceptance, the Contractor shall deliver to Director of Parks and Recreation, for preparation of the Record Drawings, one complete set of "As-Built Drawings" and documents referred to in Section 10.6.

## **SECTION 11. SCHEDULE OF THE WORK**

- 11.1 Scheduling:** The Contractor is responsible for the sequencing, scheduling, and coordinating of the Work, for monitoring the progress of the Work, and for taking appropriate action to keep the Work on schedule. The Contractor is responsible for coordinating Contractor's work on the Project with any other work being carried on by the City or by other City consultants or contractors at the site or for the Project. The Contractor shall prepare and submit to Director of Parks and Recreation a schedule for accomplishing the Work based upon the completion time stated in the Contract and submit such to Director of Parks and Recreation at the pre-construction conference. No progress payments will be made to the



Contractor until after Contractor has submitted a schedule which is acceptable to Director of Parks and Recreation. All schedules under Section 11 shall be in both paper and electronic form unless otherwise directed by Director of Parks and Recreation.

**11.2 Progress:** The Contractor shall review the progress of the Work not less than each month, but as often as necessary to properly manage the project and stay on schedule. The Contractor shall collect and preserve information on Change Orders, including extensions of time. The Contractor shall evaluate this information and update the schedule monthly to finish within the contractually allowed time. The Contractor shall submit the updated schedule with each progress payment request. The scheduled completion date shall be within the period of time allowed by the Contract for completion of construction, except as amended by any Change Orders.

**11.3 Delay and Recovery Schedule:** Should there be any delay; Director of Parks and Recreation may require the Contractor to prepare, at no extra cost to the City, a plan of action and a recovery schedule for completing the Work by the contractual completion date. The plan of action and recovery schedule shall explain and display how the Contractor intends to regain compliance with the original schedule. The plan of action and recovery schedule, when required, shall be submitted and approved by Director of Parks and Recreation prior to Contractor's submission of the next monthly construction estimate. The City may withhold progress payments until such schedule is submitted and approved.

## **SECTION 12. CONSTRUCTION SUPERVISION**

The Contractor shall be solely responsible to supervise and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract. The Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. The Contractor is solely responsible to the City that the finished Work complies with the Contract Documents. The Contractor shall be solely responsible for health and safety precautions and programs for workers and others in connection with the Work. No inspection by, knowledge on the part of, or acquiescence by the City, or any other entity whatever shall relieve the Contractor from its sole responsibility for compliance with the requirements of the Contract or responsibility for health and safety programs and precautions.

## **SECTION 13. STANDARDS FOR MATERIAL INSTALLATION AND WORKMANSHIP**

**13.1 Material and Equipment:** Unless otherwise specifically provided in this Contract, all equipment, material, and accessories incorporated in the Work are to be new and in first class condition. The Contractor shall furnish to Director of Parks and Recreation for approval the name of the manufacturer, the model number, and other identifying data and information respecting the performance, capacity, nature, and rating of the machinery and mechanical and other equipment which the Contractor contemplates incorporating in the Work.

Machinery, equipment, material, and articles installed or used without required approval may be subject to subsequent rejection by the City.

- 13.2 Hazardous Substances:** Unless specifically approved by the City or required by the specifications, the Contractor shall not incorporate any material into the Work containing asbestos or any material known by the Contractor to contain a substance known to be hazardous to health when the building and/or site is occupied by the City. If the Contractor becomes aware that a material required by the specifications contains asbestos or other hazardous substances, it shall notify the City and Director of Parks and Recreation immediately and shall take no further steps to acquire or install any such material without first obtaining City approval. (See also Sections 2.2 and 8.3 of these General Conditions.)
- 13.3 Workmanship:** The workmanship shall be of the highest quality found in the building industry in every respect. All items of Work shall be done by workmen skilled in the particular task to which they are assigned. In the acceptance or rejection of work, no allowance will be made for lack of skill on the part of workmen. Poor or inferior workmanship (as determined by Director of Parks and Recreation, the City, or other inspecting authorities) shall be removed and replaced to conform to the highest quality standards of the trades concerned, or otherwise corrected to the satisfaction of Director of Parks and Recreation, the City, or other inspecting authority all at the Contractor's sole expense.
- 13.4 Instructions for Installation:** Under the various sections of the specifications, where specified items are supplied with the manufacturer's printed instructions, recommendations, or directions for installation, or where such instructions, recommendations, or directions are available, installation of the specified items shall be in strict accordance with the manufacturer's printed instructions unless those instructions contradict the drawings or specifications, in which case Director of Parks and Recreation will be notified by Contractor for an interpretation and decision.
- 13.5 Installation Procedures Without Instructions:** Where neither the manufacturer's printed instructions are available for installation of specific items, nor are specific code or standards given by reference to govern the installation of specific items; and where there is doubt concerning the installation procedures to be followed or the quality of workmanship to be maintained in the installation of specific items, the Contractor shall consult Director of Parks and Recreation for approval of the installation procedures Contractor proposes to follow or the specific standards governing the quality of workmanship Contractor proposes to maintain during the installation of the items in question.
- 13.6 Codes and Standards:** Under the various sections of the specifications, where reference is made to specific codes or standards governing the installation of specified items, installation shall in all cases be in strict accordance with the referenced codes and standards. Where no reference is made to specific codes or standards, installation shall conform to the generally recognized applicable

standards for first-class installation of the specific item to be installed. Contractors are expected to be proficient and skilled in their respective trades and knowledgeable of the National Fire Protection Association (NFPA), the current edition of the Virginia Uniform Statewide Building Code (USBC) and its referenced technical codes and standards, Occupational Safety and Health Act (OSHA) and other codes and standards applicable to installations and associated work by its trade and/or that are applicable to the Work.

## **SECTION 14. SUBMITTALS**

- 14.1 General:** The Contractor shall submit for the approval of Director of Parks and Recreation all submittals required by the specifications or requested by Director of Parks and Recreation. All such submissions shall be made with such promptness as to cause no delay in this or any other part of the project, and to allow reasonable time for checking, correcting, resubmitting, and re-correcting. No part of the Work dealt with by a submittal shall be fabricated by the Contractor, save at Contractor's own risk, until such approval has been given. The Contractor shall maintain one (1) set of approved submittals at the jobsite at all times.
- 14.2 Format:** Submittals shall be made in such number of copies that two (2) approved copies may be retained by Director of Parks and Recreation. Each submission shall be accompanied by a letter of transmittal listing the contents of the submission and identifying each item by reference to specification section or drawings. All submittals shall be clearly labeled with the name of the project and other necessary information. Catalog plates and other similar material that cannot be so labeled conveniently, shall be bound in suitable covers bearing the identifying data.
- 14.3 Supporting Material:** Submittals shall be accompanied by all required certifications and other such supporting material and documents, and shall be submitted in such sequence or in such groups that all related items may be checked together. When submittals cannot be checked because the submission is not complete, or because submittals on related items have not been received, then such submittals will be returned without action or will be held, not checked, until the material which was lacking is received.
- 14.4 Coordination:** Submittals shall have been reviewed by the Contractor and coordinated with all other related or affected work before they are submitted for approval, and shall bear the Contractor's certification that it has checked and approved them as complying with the information given in the Contract Documents. Submittals made without such certification and coordination will be returned to the Contractor without action, and will not be considered a formal submission. The Contractor shall be responsible for checking all dimensions and coordinating all material and trades to ensure that the material proposed will fit in the space available and be compatible with other material provided.

- 14.5 Variations:** If the submittals show variations from the Contract Documents because of standard shop practice or other reasons, the Contractor shall make specific mention of such variation in Contractor's letter of transmittal in order that, if acceptable, suitable action may be taken for proper adjustment; otherwise the Contractor will not be relieved of the responsibility for executing the Work in accordance with the Contract Documents even though such submittals have been approved.
- 14.6 "Or Equal":** The drawings and/or specifications may indicate that Director of Parks and Recreation designed or detailed a portion of the plans around a particular product (most commonly a piece of equipment). Should a different product be proposed by the Contractor and accepted, all modifications, rerouting, relocations, and variations required for proper installation and coordination to comply with the design concept and requirements of the Contract Documents shall be the sole responsibility of the Contractor and shall be made at no extra cost to the City. This naming of a particular product, around which the plans were designed or detailed, is not intended to preclude the use of other products or favor the product named when a "brand name or equal" specification has been used. (See also Section 10 of Instructions to Bidders.) Rather it is only intended to acknowledge the reality that in many instances Director of Parks and Recreation must design around the dimensions and characteristics of a particular product.
- 14.7 Review by Director of Parks and Recreation:** Director of Parks and Recreation will review and respond to the submittals within five (5) calendar days. Checking and/or approval of submittals will be for general conformance with the design concept of the project and compliance with the information given in the Contract Documents, and will not include verification of quantities, detailed dimensions, nor adjustments of dimensions to actual field conditions. Approval shall not be construed as permitting any departure from Contract requirements, authorizing any increase in price or time for completion or relieving the Contractor of the responsibility for any error in details, dimensions, or otherwise that may exist.
- 14.8** The Work shall be in accordance with approved submittals.

## **SECTION 15. INSPECTION AND INDEPENDENT TESTING**

- 15.1 Inspection and Testing:** All material and workmanship shall be subject to inspection, examination, and testing by Director of Parks and Recreation at any and all times during manufacture and/or construction. Director of Parks and Recreation shall have authority to reject defective material and workmanship and require its correction. Rejected workmanship shall be satisfactorily corrected and rejected material shall be satisfactorily replaced with proper material without charge therefore, and the Contractor shall promptly segregate and remove the rejected material from the premises. If the Contractor fails to proceed at once with replacement of rejected material and/or the correction of defective

workmanship, the City may, by contract or otherwise, replace such material and/or correct such workmanship and charge the cost to the Contractor, and/or may terminate the right of the Contractor to proceed as provided in Sections 26 or 27 of these General Conditions, the Contractor and surety being liable for any damage to the same extent as provided for in those Sections.

#### **15.2 Payment for Inspection, Testing, and Certification:**

- a. Jobsite inspections, tests conducted on site, or tests of material gathered on site which the Contract requires to be performed by independent testing entities shall be contracted and paid for by the City. The Contractor shall promptly furnish, without additional charge, all reasonable facilities, labor, and material necessary for making such tests. Except as provided in Section 15.3 below, whenever such examination and testing finds defective material, equipment, or workmanship, the Contractor shall reimburse the City for the cost of reexamination and retesting.
- b. Although conducted by independent testing entities, the City will not contract and pay for tests or certifications of material, manufactured products or assemblies which the Contract, codes, standards, etc. require to be tested and/or certified for compliance with industry standards such as Underwriters Laboratories, Factory Mutual or ASTM. If there are any fees to be paid for such tests and certifications, they shall be paid by the Contractor.
- c. The Contractor shall also pay for all inspections, tests, and certifications which the Contract specifically requires it to perform or pay, together with any inspections and tests which it chooses to perform for its own quality control purposes.

**15.3 Examination of Completed Work:** Should it be considered necessary or advisable by City or Director of Parks and Recreation at any time before final acceptance of the entire Work to make an examination of any part of the Work already completed, by removing or tearing out portions of the Work, the Contractor shall on request promptly furnish all necessary facilities, labor, and material to expose the Work to be tested to the extent required. If such Work is found to be defective in any respect, due to the fault of the Contractor or its Subcontractors, Contractor shall pay for all the expenses of uncovering the Work, of examination and testing, and of satisfactory reconstruction. If, however, such Work is found to meet the requirements of the Contract, the actual cost of the Contractor's labor and material necessarily involved in uncovering the Work, the cost of examination and testing and Contractor's cost of material and labor necessary for replacement shall be paid to the Contractor and it shall, in addition, if completion of the Work has been delayed thereby, be granted a suitable extension of time.

**15.4 Suspension of Work:** The City may suspend the Work when in its judgment the drawings and specifications are not being followed. Any such suspension shall

be issued in writing and continued only until the matter in question is resolved to the satisfaction of the City. The cost of any such Work stoppage shall be borne by the Contractor unless it is later determined that no fault existed in the Contractor's Work.

**15.5 Project Inspector:** Failure of the Project Inspector to note or require correction of improper or defective work does not relieve the Contractor from its responsibility to correct such improper or defective work. The Project Inspector has no authority to and shall not:

- a. Enter into the area of responsibility of the Contractor's superintendent;
- b. Issue directions relative to any aspect of construction means, methods, techniques, sequences or procedures, or in regard to safety precautions and programs in connection with the Work;
- c. Authorize or suggest that the City occupy the project, in whole or in part; or
- d. Issue a certificate for payment.

## **SECTION 16. USE OF PREMISES AND REMOVAL OF DEBRIS**

**16.1 Jobsite Coordination:** The Contractor shall perform the Contract in such a manner as not to interrupt or interfere with the operation of any existing activity on the premises or with the work of any other contractor.

**16.2 Storage of Material:** The Contractor shall store apparatus, material, supplies, and equipment in such orderly fashion at the site of the Work as will not unduly interfere with the progress of its Work or the work of any other contractor.

**16.3 Jobsite Appearance:** The Contractor expressly undertakes, either directly or through its Subcontractor(s), to clean up frequently all refuse, rubbish, scrap material, and debris caused by his operations, to the end that at all times the jobsite shall present a neat, orderly, and workmanlike appearance. No such refuse, rubbish, scrap material, and debris shall be left within the completed Work nor buried on the building site, but shall be properly protected and removed from the site and properly disposed of in a licensed landfill or otherwise as required by law.

**16.4 Final Cleaning:** The Contractor expressly undertakes, either directly or through its Subcontractor(s), before final payment, to remove all surplus material, false work, temporary structures, including foundations thereof, and debris of every nature resulting from its operations and to put the site in a neat, orderly condition, to thoroughly clean and leave reasonably dust free all finished surfaces including all equipment, piping, etc., on the interior of all buildings included in the Contract; and to thoroughly clean all glass installed under the Contract including the removal of all paint and mortar splatter and other defacements. If a Contractor fails to clean up at the completion of the Work, the City may do so and charge for costs thereof to the Contractor in accordance with these General Conditions.

- 16.5 Erosion Control:** During and at completion of the Work, the Contractor shall prevent site soil erosion, the runoff of silt and/or debris carried by water from the site, and the blowing of dust or debris off the site in accordance with the applicable requirements and standards of the Virginia Erosion and Sediment Control Handbook, latest edition, and of the Contract Documents.

## **SECTION 17. PROTECTING PERSONS AND PROPERTY**

- 17.1 Protection on Site:** The Contractor expressly undertakes both directly and through its Subcontractor(s), to take every reasonable precaution at all times for the protection of all persons and property which may come on the jobsite or be affected by the Contractor's operation in connection with the Work.
- 17.2 Safety and Health Precautions:** The Contractor shall be solely responsible for initiating, maintaining, and supervising all safety and health precautions and programs in connection with the Work, including but not limited to provision of appropriate sanitation facilities, if applicable.
- 17.3 Protecting the Public:** The Contractor shall in all cases protect the public and the Work, during its execution, by posting and maintaining, at its expense, appropriate signs, barricades, barriers, lights, flagmen, and other safety devices in accordance with the current edition of the "Virginia Work Area Protection Manual".
- 17.4 Protecting the Work and Adjacent Property:** The Contractor shall continuously maintain adequate protection of all the Work from damage and shall protect the City's property from injury or loss arising in connection with this Contract. The Contractor shall adequately protect adjacent property to prevent any damage to it or loss of use and enjoyment by its owners. The Contractor shall provide and maintain all passageways, guard fences, lights, and other facilities for protection required by public authority, local conditions, any of the Contract Documents or erected for the fulfillment of its obligations for the protection of persons and property.
- 17.5 Emergencies:** In an emergency affecting the safety or life of persons or of the Work, or of the adjoining property, the Contractor, without special instruction or authorization from Director of Parks and Recreation, shall act, at Contractor's discretion, to prevent such threatened loss or injury. Also, should Contractor, to prevent threatened loss or injury, be instructed or authorized to act by Director of Parks and Recreation, Contractor shall so act immediately, without appeal.

## **SECTION 18. DAMAGES TO THE WORK AREA**

- 18.1 Damage to the Work:** The Contractor shall have charge of and be solely responsible for the entire Work and be liable for all damages to the Work including, but not limited to any of the damages hereafter mentioned, and to any property in the vicinity of the Work, until its completion and acceptance by Director of Parks and Recreation.

- a. Where the work involves alterations, renovations, or modifications to any existing building, the Contractor shall familiarize itself with the structural condition of such building before proceeding with any work. It shall be the Contractor's responsibility to take all necessary safeguards to protect and maintain all parts of the building in a safe condition at all times during the process of construction and to protect from damage those portions of the building that are to remain.
- b. Under no condition shall any load be placed on any part of a building, whether new or existing, in excess of the load the structure will safely support, and no structural member(s) shall be cut or altered without the written consent of Director of Parks and Recreation.
- c. The Contractor shall conduct all operations in such a manner as to avoid damage to existing work and surfaces within any existing building that are to remain. Any and all damaged work and surfaces shall be repaired, replaced, or restored to their original condition at the time when this work was started, and the expense of such work shall be borne by the Contractor.

**18.2 Damage to Utilities:** The respective Utility Company shall be given a minimum of forty-eight (48) hours notice prior to any adjustment of utilities, and the Contractor shall comply with the provisions of the Virginia Underground Utilities Damage Prevention Act, Section 56-265.14 et seq., of the Code of Virginia. Damages that may occur to the utilities during the Work shall be the sole responsibility of the Contractor.

**18.3 Relocation of Utilities:** Should any utilities require adjustment during the Work, it shall be the Contractor's responsibility to have such utilities relocated as a part of the Work and to contact and cooperate with the respective Utility Company in performance of such operations.

**18.4 Damage to Other Work and Existing Structures:** The Contractor shall take into account all other work which shall be done by other parties on the jobsite, either now known or which may become necessary during the progress of the Work, and shall be responsible for any damage done to the other work. Damage to concrete curbs, gutters, sidewalks, or any existing facility that may occur during the construction shall be repaired or replaced by the Contractor, at its sole expense, as directed by and to the satisfaction of Director of Parks and Recreation.

**18.5 Weather Damage:** Damage with respect to the Work caused by the weather shall be the responsibility of the Contractor.

**18.6 Blasting:** Any damage that may occur due to blasting shall be the sole responsibility of the Contractor.



## **SECTION 19. CHANGES IN THE WORK**

- 19.1 Changes in Drawings and Specifications:** The City reserves the right to make such changes in the drawings and specifications and in the character of the Work as may be necessary or desirable to ensure completion in the most satisfactory manner, provided such changes do not materially alter the original plans and specifications or change the general nature of the Work as a whole. Such changes shall not be considered as waiving or invalidating any condition or provision of the Contract and Bonds. Such changes shall be issued by Director of Parks and Recreation to Contractor.
- 19.2 Changes in Quantities:** The City reserves the right to make changes in the quantities of the Work, as may be considered necessary or desirable and such changes shall not be considered as waiving or invalidating any conditions or provisions of the Contract or Bonds. The Contractor shall perform the Work as altered, whether increased or decreased, and no allowances shall be made for anticipated profits. Payment to the Contractor for the changes in the quantities of work shall be made only for the actual quantities of work performed and material furnished at the unit prices set forth in the Contract, except as provided below.
- a. When the quantity of work to be done or of material to be furnished under any item of the Contract is more than 125 percent of the quantity stated in the Contract, then either party to the Contract, upon demand, shall be entitled to negotiate for revised consideration on the portion of work above 125 percent of the quantity stated in the Contract.
  - b. When the quantity of work to be done or of material to be furnished under any item of the Contract is less than 75 percent of the quantity stated in the Contract, then either party to the Contract, upon demand, shall be entitled to negotiate for revised consideration on the Work performed.
  - c. Any consideration after that as set forth above shall be paid for as is hereinafter provided under Section 19.7. The foregoing notwithstanding, the quantity of work to be done or of material to be furnished under any item of the Contract, or the total original Contract shall not be increased more than 25 percent or reduced by more than 25 percent without the written consent of the Contractor and City.
- 19.3 Changes in the Work:** No change with respect to the Work, except in an emergency situation threatening life or property, shall be made by the Contractor without the prior written approval of the City. The Contractor shall deliver any request for a change in the Work, Contract price, and/or completion time in writing to Director of Parks and Recreation within ten (10) calendar days of the occurrence requiring the change. The Contractor shall be required to certify the cause of the change order and, if appropriate, length of time involved. Payment for such changes approved by Director of Parks and Recreation shall be as set forth in Section 19.7. This written request is a condition precedent to the consideration of any such request by the City.

#### **19.4 Delays:**

- a.** In the event a delay is caused by the City, Director of Parks and Recreation, any other separate contractor employed by the City, or any party for whom the Contractor deems the City responsible, or the agents and employees of any of them, the Contractor shall inform the City and Director of Parks and Recreation immediately at the time of the occurrence by the fastest means available and shall give written notice within a reasonable time, not to exceed ten (10) calendar days. The Contractor's notice to Director of Parks and Recreation shall specify the nature of the delay claimed by the Contractor, the cause of the delay, and the impact of the delay on the Contractor's work schedule to the fullest extent possible. The City will, within a reasonable time, not to exceed ten (10) calendar days, respond to the Contractor's notice with a resolution, remedy, or direction to alleviate the delay or with a notice rejecting the claim for delay alleged to be caused by the City or parties for whom the City is responsible. If the delay is not then resolved, the Contractor may then submit a request for change order in accordance with Sections 19.3 and 19.5. In the event of other delays, the Contractor shall give the City and Director of Parks and Recreation written notice within ten (10) calendar days of the occurrence causing the delay.
- b.** No extension of time or compensation shall be allowed for a delay if the Contractor failed to give notice in the manner and within the time prescribed in Subsection 19.4 (a). Furthermore, no extension of time shall be given or additional compensation allowed for any delay unless a claim therefore is made in writing to the City, with a copy to Director of Parks and Recreation, within ten (10) calendar days of the occurrence causing the delay. The claim shall state the cause of the delay, the number of days of extension requested, and any compensation requested by the Contractor. The Contractor shall report the termination of the delay to the City and Director of Parks and Recreation not less than ten (10) calendar days after such termination. Failure to give notice of either the inception or the termination of the cause of delay or failure to present a claim for extension of time and/or monetary compensation within the times prescribed are conditions precedent to the assertion of any such claims by Contractor and shall constitute a waiver by Contractor of any such claims for compensation or extension based upon that cause.
- c.** Requests for compensation for delays must be substantiated by itemized data and records clearly showing that the work delayed were progressing according to the approved schedule and that the costs are directly attributable to the delay in the Work claimed. The Contractor shall provide written schedules demonstrating how the Work being delayed affects the approved schedule.

- d. No extension of time, additional compensation, or change in the Contract price shall be allowed for any delays caused in whole or in part by the Contractor, any subcontractors, or any supplier. (For unavoidable justified delays, see Section 19.9 of these General Conditions.)

**19.5 Change Orders:** All change orders must indicate that the Contract Time for Completion is not changed or is either increased or decreased by a specific number of days. Any change or requested change in the Contract price shall also be included in the change order. The Contractor must provide written justification for an extension of the Time for Completion to Director of Parks and Recreation and to the City. The written justification must demonstrate an anticipated actual increase in the time required to complete the Work beyond that allowed by the Contract as adjusted by prior change orders or amendments to the Contract, not just an increase or decrease in the time needed to complete some portion of the total Work. When a Critical Path Method (CPM) schedule is required by the Contract, or is used for the convenience of the Contractor, no increase to the Time for Completion shall be allowed unless, and then only to the extent that, the additional or changed Work increases the length of the critical path. Approved increases in time required to complete the Work shall be added to the Time for Completion. Decreases in time as a result of the change order shall be demonstrated by a decrease in the critical path of the work if CPM scheduling is properly used and updated by the Contractor. If not, the City shall determine the appropriate decrease by the best means possible. Approved decreases in the time needed to complete the Work shall be deducted from the Contract completion date. The change to time or Contract price allowed by each change order shall include all time and monetary impacts of the change, whether the change order is considered alone or with all other changes during the course of the project. Failure to include a change to time and/or Contract price in a change order shall waive any claims the Contractor may have for any change to the time and/or Contract price unless the parties mutually agree in writing to postpone a determination of the change to time and price resulting from the change order. Such a determination may be postponed not more than forty-five (45) calendar days to give the Contractor an opportunity to demonstrate a change in the time and/or price needed to complete the Work. However, the Contractor shall continue with the Work as may be directed by Director of Parks and Recreation and shall not stop work on the Project unless directed to do so by Director of Parks and Recreation.

**19.6 Extra Work:** The City reserves the right to make alterations or changes in the Work as the Work progresses. When any work is necessary to the proper completion of the project which was not provided for in the Contract, the Contractor shall do such work, but only when and as ordered in writing by Director of Parks and Recreation. Payment for such extra work shall be made as hereinafter provided in Section 19.7.

**19.7 Payment Methods for Extra Work:** The extra work done by the Contractor as authorized and approved by Director of Parks and Recreation shall be paid for in

the manner hereinafter described; and the compensation thus provided shall be accepted by the Contractor as payment in full for all labor, material, tools, equipment, incidentals, all superintendents' and timekeepers' services, all insurance, bonds, and all other reasonable overhead expenses incurred in the performance of the extra work. Payment for extra work may be made by one of the following methods, as agreed on in writing by Director of Parks and Recreation and the Contractor before said extra work is commenced, subject to all other conditions of the Contract:

- a. Unit prices; or
- b. Lump sum price; or
- c. The cost of change in work plus ten percent (10%) of allowable costs. Allowable costs for purposes of this paragraph shall only include labor, material, sales tax, the rental of power tools and equipment actually used, or a reasonable price for the use of power tools and equipment owned by the Contractor based upon their life expectancy and purchase price, utilities, pro rata charges for foremen, and all payroll charges such as employer's FICA contribution, Public Liability and Workers' Compensation Insurance, but only if all such costs are incurred as the direct result of the changes in the Work. The change in cost for labor and material bonds and for performance bonds relative to the value of the extra work shall be allowable cost but shall not be marked up. If any subcontractor at any tier does all or part of the Work, the subcontractor's markup on that Work shall be fixed at fifteen percent (15%) of the allowable cost as defined herein.

**19.8 Disputed Claims for Extra Work:** If one of the payment methods set forth in Section 19.7 is not agreed on by Director of Parks and Recreation, the City may retain either an independent contractor to perform such extra work or use its own forces to perform such extra work and the Contractor shall cooperate fully with the independent contractor or City in its performance of the extra work. However, Director of Parks and Recreation may also direct Contractor to perform such extra work and any dispute will be handled as set forth in Section 31 of these General Conditions.

**19.9 Change in Contract Time or Contract Price:** The Contractor may request an extension of time or change in the Contract price should the Work be obstructed or delayed by any justified unavoidable delays not caused in whole or in part by the Contractor, any subcontractor, or suppliers. However, delays caused by weather conditions will not be considered justified unavoidable delays unless they are caused by unusual weather as set forth in Section 4.2 of the Instructions to Bidders, in which case only an extension of time may be considered by City, but no additional compensation will be allowed for unusual weather. Furthermore, Contractor agrees that for any delays not caused by the City or any delays beyond the control of the City, no additional compensation will be due the Contractor and no change in the Contract price will be allowed by the City, only

an extension of the Contract time will be considered by the City. The Contractor shall deliver requests for changes in the Contract price and/or completion time in writing to Director of Parks and Recreation within ten (10) calendar days of the occurrence requiring the change. Approved changes that alter the time of the Contract shall extend the completion time by a period equivalent to the certified time lost by such occurrence. No change in Contract price and/or completion time shall be allowed if the above notice has not been properly given, such notice being a condition precedent to any such request by the Contractor. However, the Contractor shall continue with the Work as may be directed by Director of Parks and Recreation and shall not stop work on the Project unless directed to do so by Director of Parks and Recreation.

## **SECTION 20. PAYMENT FOR WORK**

- 20.1 Monthly Construction Estimates:** Monthly construction estimates shall be submitted to Director of Parks and Recreation, 1802 Courtland Road, N.E., Roanoke, Virginia 24012, no more than once every thirty (30) calendar days.
- 20.2 Preparing Progress Payment Requests:** In preparing construction estimates, the Contractor may request a progress payment based on the actual percentage of work completed during the preceding month. The estimate shall contain a breakdown of the total Contract amount; to include a separate breakdown of all approved change orders, into principal items of construction, showing the estimated quantity, unit price, and total for each item. In preparing progress payment requests, the material delivered on the site and preparatory work done may be taken into consideration, if properly documented, or as may be required by Director of Parks and Recreation so that quantities can be verified. In addition to material delivered on the site, material such as large pieces of equipment and items purchased specifically for the project, but stored off the site, may be considered for payment, provided prior written approval is given by Director of Parks and Recreation.
- 20.3 Progress Payments:** The City will make a progress payment to the Contractor on the basis of a duly certified and approved progress payment request for the work performed under the Contract. In the event that the City disagrees with the monthly construction progress payment request submitted by the Contractor, or in the event the As-Built Drawings are not being kept current, the City may withhold all or a portion of the progress payment until such dispute is resolved to the satisfaction of the City. If there are any objections or problems with the progress payment request, the City will notify the Contractor of such matters. If the progress payment request is approved by the City, payment will be made by the City to the Contractor not more than thirty (30) calendar days after such request has been approved. However, if there is an objection or problem with a progress payment request, the Contractor shall continue with the Work as may be directed by Director of Parks and Recreation and shall not stop work on the Project unless directed to do so by Director of Parks and Recreation. Any such disputes shall be handled as set forth in Section 31 of these General Conditions.

- 20.4 Retainage:** To ensure proper performance of the Contract, the City shall retain, unless stipulated otherwise, five percent (5%) of each progress payment until Final Acceptance of all work covered by the Contract. The Contractor may request that such retainage be paid into an escrow account on certain Contracts, pursuant to Section 2.2-4334 of the Code of Virginia. (See also Sections 6.2 and 14.6 of Instructions to Bidders.)
- 20.5 Ownership of Material and Work:** All material and work covered by progress payments shall become the property of the City. This provision shall not relieve the Contractor from the responsibility for all material and to maintain all completed work and to repair all damaged work. The Contractor shall not deem a progress payment as a waiver to complete the terms of the Contract or shift the risk of loss from the Contractor to the City. The Contractor warrants that Contractor has good title to all material, equipment, and supplies which Contractor uses in the Work or for which Contractor accepts payment in whole or in part.
- 20.6 Payments to Others by Contractor:** The Contractor agrees that Contractor will comply with the requirements of Section 2.2-4354 of the Code of Virginia regarding Contractor's payment to other entities and that Contractor will take one of the two actions permitted therein within seven (7) calendar days after receipt of amounts paid to Contractor by the City. The Contractor agrees that Contractor shall indemnify and hold the City harmless for any lawful claims resulting from failure of the Contractor to make prompt payments to all persons supplying him equipment, labor, tools, or material in prosecution and completion of the Work provided for in the Contract. In the event of such claims, the City may, after providing written notice to the Contractor, withhold from any progress and/or final payment the unpaid sum of money deemed sufficient to pay all lawful claims and associated costs in connection with the Contract.
- 20.7 Final Payment:** Within thirty (30) calendar days after the Final Acceptance of the Work, the City shall pay the Contractor the Final Payment, less all prior payments, damages, setoffs, liquidated damages, any amounts withheld from retainage, or any other amounts Contractor may owe the City for any reason whatever.
- 20.8 Payment and Acceptance:** No payment, final or otherwise, nor partial or entire use, occupancy, or acceptances of the Work by the City shall be an acceptance of any work or material not in accordance with the Contract, nor shall the same relieve the Contractor of any responsibility for any faulty material or workmanship or operate to release the Contractor or its surety from any obligation under the Contract or the Performance Bond or the Labor and Material Payment Bond.
- 20.9 Right to Audit:** The Contractor agrees that the City, and any approving Federal or State Agency or any of their duly authorized representatives, shall have access to any books, documents, papers, records, schedules and electronic data of the Contractor which are pertinent to this Project for the purpose of making an

audit, examinations, excerpts, copies or transcriptions and that Contractor will provide copies of such items to City upon City's request, at no cost to City.

**SECTION 21. NOT USED.**

**SECTION 22. INSPECTION FOR SUBSTANTIAL COMPLETION AND FINAL ACCEPTANCE**

- 22.1 Substantial Completion:** The Contractor shall notify the City, in writing, that the Work will be ready for inspection to determine if it is substantially complete and ready for testing on or after a certain date, which date shall be stated in the notice. The notice shall be given at least ten (10) calendar days in advance of said date and shall be forwarded through Director of Parks and Recreation. Inspection and testing shall take place at a time mutually agreeable to the Contractor, City, and Director of Parks and Recreation. The inspection shall determine if substantial completion has been accomplished. If so, Director of Parks and Recreation will issue a Certificate of Substantial Completion and attach a written list of unfinished Work and defective Work, commonly referred to as a "punch list", which must be finished and corrected to obtain Final Acceptance.
- 22.2 Request for Final Acceptance:** The Contractor shall notify Director of Parks and Recreation, in writing, that the Work will be ready for final inspection and testing on or after a certain date, which date shall be stated in the notice. That inspection and any necessary testing shall be conducted in the same manner as the inspection for substantial completion. When the Work is finally and totally complete, including the elimination of all known deficiencies, the Work shall be finally accepted by the City and final payment shall be made in accordance with Section 20.7 of these General Conditions.
- 22.3 Final Inspection:** Director of Parks and Recreation will conduct the final inspection, and may elect to have other persons of its choosing also participate in the inspection. If one or more re-inspection is required, the Contractor shall reimburse the City for all costs of re-inspection or, at the City's option, the costs may be deducted from payments due to the Contractor.
- 22.4 As-Built Drawings:** No Contract retainage will be released prior to receipt of all approved As-Built Drawings.
- 22.5 Final Acceptance:** Upon successful completion of the final inspection and all Work required by the Contract, including but not limited to the delivery of the following documents and items; As-Built drawings, operation and maintenance manuals, written warranties, Certificate of Substantial Completion, Affidavit of Payment of Claims, and MBE/WBE/SB/VB Usage Status Form, Director of Parks and Recreation will furnish a written Certificate of Final Acceptance of the Work to the Contractor. Director of Parks and Recreation may accept the Work for

occupancy or use while asserting claims against the Contractor, disputing the amount of compensation due to the Contractor, disputing the quality of the Work, its completion, or its compliance with the Contract Documents, and the like.

- 22.6 Release By Contractor:** The acceptance by the Contractor of the final payment or a payment designated as such shall be and does operate as a release by the Contractor of all claims by the Contractor against City and of all other liability of the City to the Contractor whatever, including liability for all things done or furnished in connection with the Work or the Contract.

## **SECTION 23. WARRANTY OF MATERIAL AND WORKMANSHIP**

- 23.1** The Contractor warrants that, unless otherwise specified, all material and equipment incorporated in the Work under the Contract shall be new, in first class condition, and in accordance with the Contract Documents. The Contractor further warrants that all workmanship shall be of the highest quality and in accordance with the Contract Documents and shall be performed by persons qualified at their respective trades.
- 23.2** Work not conforming to these warranties shall be considered defective.
- 23.3** These warranties of material and workmanship are separate and independent from and in addition to any of the Contractor's other guarantees or obligations in this Contract or that may arise by law.

## **SECTION 24. GUARANTEE OF WORK**

- 24.1 Two Year Warranty:** The Contractor does warrant and guarantee the Work against defects or deficiencies in the Work and in all material, equipment, and workmanship for a period of two (2) years from the date of Final Acceptance.
- 24.2 Defective Work:** The Contractor agrees it shall repair or replace, at Contractor's sole expense, and to the satisfaction of Director of Parks and Recreation, any work, material, equipment, or part that is found, by Director of Parks and Recreation, to be defective.
- 24.3 Repairs:** If, within any guarantee period, defects are noticed by Director of Parks and Recreation which require repairs or changes in connection with the guaranteed work, those repairs or changes being in the determination of Director of Parks and Recreation rendered necessary as the result of the use of material, equipment, or workmanship which is defective, inferior, or not in accordance with the terms of the Contract, then the Contractor shall, promptly upon receipt of notice from Director of Parks and Recreation, such notice being given not more than four weeks after the expiration of any such guarantee period, and without any expense to the City:
- a.** Place in satisfactory condition all guaranteed work and correct all defects therein; and



- b. Make good all damage to the structure, site, equipment, or contents thereof, which in the determination of Director of Parks and Recreation is the result of the use of material, equipment, or workmanship which are inferior, defective, or not in accordance with the terms of the Contract; and
- c. Make good any work or material or the equipment and contents of structures or the site disturbed in fulfilling any such guarantee.

**24.4 Warranty Extension:** In any case, where in fulfilling the requirements of the Contract or any guarantee embraced in or required thereby, the Contractor disturbs, damages or repairs any work guaranteed under the Contract, Contractor shall restore such work to a condition satisfactory to Director of Parks and Recreation and guarantee such restored work to the same extent and for a like additional period of time as it was originally guaranteed under this Contract.

**24.5 Correction of Defects:** If the Contractor, after notice, fails to proceed promptly, but in no event longer than thirty (30) calendar days after such notice, unless otherwise agreed to by Director of Parks and Recreation, to comply with the terms of the guarantee and/or correct the Work, the City may have the defects corrected by its own forces or another contractor and the Contractor and its surety shall be liable for all costs and expenses incurred in doing so.

**24.6** Nothing contained in this section shall be construed to establish a period of limitation with respect to any other obligation which the Contractor might have under the Contract Documents or the law of Virginia, including liability for defective work.

## **SECTION 25. STOP WORK ORDER**

In the event that conditions exist such that no work can or should continue, other than the routine closing of the site, the Contractor may submit to Director of Parks and Recreation a request to stop work or Director of Parks and Recreation on his/her own may issue a Stop Work Order. Director of Parks and Recreation will, if he/she approves the request or issues the order himself/herself, deliver a written "Stop Work Order" to the Contractor stipulating the effective date and the Contract time remaining. The Work, other than the routine closing of the site, and Contract time shall not again be started until a written "Resume Work Order" is received by the Contractor from Director of Parks and Recreation. When the Work is stopped at the request of the Contractor and through no fault of the Contractor, the Contractor may only recover from the City payment for the cost of the Work actually performed, together with reasonable overhead and profit thereon up to that time, but profit shall be recovered only to the extent that the Contractor can demonstrate that it would have had profit on the entire Contract if it had completed the Work. The Contractor may not receive profit or any other type of compensation for parts of the Work not performed, including, but not limited to, home office overhead or any other such costs. The Contractor may also recover the actual cost of physically closing down the jobsite, but no other costs of the Stop Work Order. The City may offset any claims it may have against the Contractor against the amounts due to the Contractor. In no event shall the Stop Work Order to the Contractor relieve in

any way the obligations of the Contractor's surety on its payment and performance bonds. When work is stopped by Director of Parks and Recreation due to any fault of the Contractor, the Contractor may not recover any of the above costs or items or any other costs, profits, expenses, or damages of any type.

## **SECTION 26. TERMINATION OF CONTRACT FOR CAUSE**

- 26.1 Termination for Cause:** If the Contractor should be adjudged a bankrupt, or if it should make a general assignment for the benefit of its creditors, or if a receiver should be appointed on account of its insolvency, the City may terminate the Contract. If the Contractor should refuse or should fail, except in cases for which extension of time is provided, to supply enough properly skilled workmen or proper material, or if it should fail to make prompt payment to subcontractors or suppliers of material or labor, or disregard laws, ordinances, or the written instructions of Director of Parks and Recreation, or otherwise fails to comply with any of the terms or provisions of this Contract including, but not limited to, poor services, work or material, then the City may terminate this Contract. In no event shall termination for cause terminate the obligations of the Contractor's surety on its payment and performance bonds.
- 26.2 Possession of Work:** Upon termination of the Contract, the City may take possession of the premises and of all material, tools, and appliances thereon and finish the Work by whatever method the City may deem expedient. In such case the Contractor shall not be entitled to receive any further payment of any type. If the expense of finishing the Work, including compensation for additional managerial and administrative services, shall exceed the unpaid balance of the Contract price, the Contractor shall pay the difference to the City, together with any other cost or expenses of terminating the Contract and having it completed by others, together with any and all other damages City may be entitled to from the Contractor.
- 26.3 Alternative Termination:** If it should be judicially determined that the City improperly terminated this Contract for cause, then the termination shall be deemed to be a termination for the convenience of the City.
- 26.4 Termination Rights:** Termination of this Contract under Section 26 or Section 27 is without prejudice and in addition to any other rights or remedies of the City against the Contractor.

## **SECTION 27. TERMINATION FOR CONVENIENCE OF CITY**

- 27.1 Termination for Convenience:** The City, at its discretion, may terminate this Contract at any time without cause, in whole or in part, upon giving the Contractor written notice of such termination. Upon such termination, the Contractor shall immediately cease work and remove from the jobsite all of its labor forces, equipment, and material as City elect not to purchase or to assume in the manner hereinafter provided. Upon such termination, the Contractor shall take such steps as City may require assigning to the City the Contractor's interest

in all subcontracts and purchase orders designated by City. After all such steps have been taken to City's satisfaction; the Contractor shall receive as full compensation for termination and assignment only the following:

- a. All amounts then otherwise due under the terms of this Contract for actual work performed and approved by City; and
- b. Reasonable compensation for the actual cost of demobilization incurred by the Contractor as a direct result of such termination. The Contractor shall not be entitled to any compensation for lost profits or for any other type of contractual compensation or damage, other than those provided by the preceding sentence, including any on site or home office overhead. Upon payment of the foregoing, City shall have no further liabilities or obligations to Contractor of any nature.

**27.2 Termination Effect on Surety:** In no event shall termination for the convenience of the City terminate the obligation of the Contractor's surety on its payment and performance bonds.

## **SECTION 28. PRECONSTRUCTION CONFERENCE**

Director of Parks and Recreation shall notify the Contractor as to the location, date, and time of a preconstruction conference to confirm procedures for processing construction estimates for payment and related submissions and to discuss other matters pertaining to scheduling and execution of the Work.

## **SECTION 29. PROJECT SIGN(S)**

The Contractor shall supply, erect, and maintain Project Sign(s) in accordance with the City of Roanoke Standard Detail. The sign(s) shall be located as directed by Director of Parks and Recreation. The Contractor shall not display any other signs or advertisements.

## **SECTION 30. ASSIGNMENTS**

The Contractor shall not assign, in whole or in part, any of its rights, duties, or obligations under this Contract with the City without the prior written consent of the City.

## **SECTION 31. CONTRACTUAL DISPUTES**

Contractual claims, whether for money or for other relief, including any disputes as to change orders or extra work, shall be submitted, in writing, no later than sixty (60) calendar days after final payment or payment designated as a final payment; however, written notice of the Contractor's intention to file such claim must be given at the time of the occurrence or beginning of the work upon which the claim is based. Such notice is a condition precedent to the assertion of any such claim by the Contractor. A written decision upon any such claims will be made by the City Manager or his/her designee (hereafter City Manager) within thirty (30) calendar days after submittal of the claim and any practically available additional supporting evidence required by the City Manager.

The Contractor may not institute legal action prior to receipt of the City's decision on the claim unless the City Manager fails to render such decision within one hundred twenty (120) calendar days from submittal of its claim. The decision of the City Manager shall be final and conclusive unless the Contractor within six (6) months of the date of the final decision on a claim or from expiration of the 120 day time limit, whichever occurs first, initiates legal action as provided in Section 2.2 - 4364, of the Code of Virginia. Failure of the City to render a decision within said one hundred twenty (120) calendar days shall not result in the Contractor being awarded the relief claimed nor shall it result in any other relief or penalty. The sole result of the City's failure to render a decision within said one hundred twenty (120) calendar days shall be Contractor's right to immediately institute legal action. No administrative appeals procedure pursuant to Section 2.2 - 4365, of the Code of Virginia, has been established for contractual claims under this Contract.

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## TECHNICAL SPECIFICATIONS

### Section 01000

#### Special Conditions

##### 1. Part 1 General

1.1. Location of Work -The project consists of constructing a new tennis facility in Rivers Edge Park-North in the City of Roanoke, VA. Project includes, but is not limited to, clearing, grading, concrete construction, asphalt paving, and bio-retention pond construction.

1.2. The Plan set is incomplete unless accompanied by the City Project Manual. Likewise, this Project Manual is incomplete unless accompanied by the Plans. The Plan set was developed using a 24"x36" paper size.

1.3. All products and materials shall be new and in first class condition.

1.4. The Contractor shall provide the City's Project Manager, City's Inspector, or other City representatives, safe access to all areas of work throughout the course of the construction project and for final inspection. Safe access includes the use of man-lifts, operated by a Contractor's representative, or any other such equipment as needed to reach areas of inspection.

##### 1.5. NOT USED

1.6. Contractor Superintendent – At all times during the project, the Contractor shall be required to have a competent Superintendent on site. The Contractor shall designate the Superintendent at the pre-construction conference. Under no circumstances, shall the Contractor designate multiple Superintendents. The designated Superintendent shall have adequate social skills to interact with City Inspector and City Project Manager. Not having the designated Superintendent on-site during any work operations, including subcontractor's work operations, may result in a Stop Work Order issued by the City Project Manager. The Contractor shall be responsible for any delays and monetary losses resulting from the Stop Work Order. Once the designated Superintendent has returned to the project site, a Resume Work Order may be issued by the City Project Manager.

1.7. In accordance with Section 29 of the General Conditions, one week prior to mobilization for construction activities, the Contractor shall erect a construction sign on site to notify the business owners, commuters and residents about the construction activities. The sign shall indicate:

- Project Name
- Contractor Name
- Construction Start Date

See Appendix A for a detail.

## 1.8. Safety

1.8.1. Citizen and workman safety shall be given top priority at all times.

1.8.2. See Section 17 of the General Conditions for additional requirements.

2. Traffic Maintenance, Work Area Protection, and Access – See Section 02050

3. Utilities – See Section 02100

## 4. Required Permits

4.1. The Contractor shall obtain a City of Roanoke business license before any permits are issued. Contact the City Commissioner of the Revenue for information on obtaining a license at 1-540-853-2521.

4.2. City of Roanoke Right of Way Excavation (ROWE) Permit, administered by the City Transportation Division, for any work performed in the City of Roanoke Right of Way.

4.2.1. Contractor shall apply for the permit at the Permit Center located in the municipal building - 215 Church Ave, SW Room 170). The City Parks and Recreation Department shall pay the application fee associated with the ROWE permit. However, the Contractor is required to have a bond with a two (2) year warranty provision for the ROWE permit. This bond is additional and separate from the Contractor's Performance Bond required by the City of Roanoke Parks and Recreation Department.

4.3. A City of Roanoke Land Disturbing Permit shall be required. The Contractor shall be required to have a Registered Land Disturber, as specified by the Virginia Department of Conservation and Recreation. The City Department of Parks and Recreation shall pay the application fee associated with the Land Disturbing permit. The City of Roanoke permit number is CP140064.

4.4. City of Roanoke Building Permit shall be required for:

4.4.1 Cast-in-place concrete work in the City right of way or on public City property (i.e. Parks)

4.4.2 Any utilities on public City property not in the City right of way (i.e. Parks).

4.4.2.1 Contractor shall coordinate and arrange for City of Roanoke Building Department inspections. The City of Roanoke Department of Parks and Recreation will not coordinate this effort.

4.4.3 The City Department of Parks and Recreation shall pay for the building permit(s) but the Contractor shall be named as permittee.

#### 4.5 Permits for Off-Site Soil Disposal and Soil Borrow Areas

4.5.2 The City of Roanoke Planning Department may require permit verification (City and County land disturbing permits) for any off-site soil disposal and soil borrow areas. It is the Contractor's responsibility to coordinate and comply with Planning Department requirements.

### 5 Grass / Landscaping Establishment

5.1 Substantial completion of the project may occur outside of the permanent seeding window. Therefore, the contractor will apply temporary seed and mulch after final grades are established. The City project manager will issue a Stop Work Order until the permanent seeding window is opened (September 1st). Once in the permanent seeding window, the City project manager will then issue a Resume Work Order and a time extension will be given. The contractor will then apply permanent seed, establish final stabilization and request final acceptance. Retainage will not be paid until final acceptance is issued by the City project manager. The Contractor will not be reimbursed for remobilization due to the seeding growth window. Unless noted otherwise in the specifications, Southern Lawn shall be used as the permanent seed mixture.

5.2 Grass and landscaping establishment is required before the City issues final acceptance. Failure to establish grass and landscaping may result in the issuance of liquidated damages as specified under the Contract.

### 6 Inspectors

6.1 The City of Roanoke shall have a construction inspector assigned to each project.

6.1.1 The construction inspector reports directly to the City of Roanoke project manager.

6.1.2 The inspector shall be responsible for checking quality control, conformance of work with respect to project documents, and quantities for pay requests.

6.1.3 Contractor shall give the inspector proper notice for paving operations and concrete pours.

6.1.3.1 Inspector shall be present during all concrete pours and paving / tacking operations.

6.1.4 Upon substantial completion of the project, the inspector shall develop a punch list of items to be resolved before final acceptance.

6.1.5 Inspectors shall be responsible for checking work for acceptance within warranty periods.

6.2 If sanitary sewer or water distribution work is being performed within the project scope, a Western Virginia Water Authority (WVWA) construction inspector may be assigned to the Project.

6.3 The Contractor is warned that only the City Project Manager can authorize additional work or changes in scope. Proceeding with work at the direction of the WVWA or any other entity is the Contractor's risk.

6.4 The Contractor shall remove from the project site any employee or subcontractor employee deemed disorderly in accordance with Section 5.2 of the General Conditions.

## 7 Erosion and Sediment Control

7.1 Payment for Erosion and Sediment Control devices shall not only include installation and maintenance of the device but also the removal and disposal of the device after final stabilization is achieved. Additional mobilization for disposal of Erosion and Sediment Control devices shall not be a basis for an increase in Contract amount.

8 Demolition Material / Excess Building Materials / Excess Soil Material - Contractor shall not provide any adjoining property owners along the Project Site (citizens or businesses) with any demolition materials, excess building materials, or excess soil material.

9 NOT USED.

10 NOT USED.

## 11 Storage of Fuel Tanks

11.1 No fuel tanks shall be stored overnight on the City right-of-way system or project site.

End of Section



## Section 01100

### Hierarchy of Construction Documents

#### 5. Part 1 General

5.1. The General Conditions, Supplemental General Conditions, Plans, Technical Specifications, Virginia Department of Transportation Road (VDOT) Road and Bridge Specifications, VDOT Special Provisions and United States Tennis Association standards and specifications are parts of the Contract. A requirement occurring in one shall be as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete work. In case of a discrepancy, the following order of priority will apply, with the highest governing item appearing first and the least governing item appearing last:

5.1.1. Technical Specifications

5.1.2. General Conditions

5.1.3. Supplemental General Conditions

5.1.4. United States Tennis Association Standards and Specifications

5.1.5. Plans. Calculated dimensions, unless obviously incorrect, will govern over scaled dimensions.

5.1.6. VDOT Special Provisions

5.1.7. VDOT Road and Bridge Specifications

End of Section

## Section 01350

### Submittals

#### 1. General

1.1. Submittals shall include all anticipated shop drawings, product data, and samples as defined in the Contract Documents and also include certificates, test data, and other submitted data required to demonstrate compliance with the contract documents. See General Conditions Section 14 for more information.

1.1.1. Concrete mix products

1.1.2. Asphalt products

1.1.3. Steel products

1.1.4. Aggregate Base products

#### 1.2. Submittal Register – Provide 3 Copies of Each Submittal

Submittal Number Description

1 \*\*Schedule

2 \*\*Traffic Control Plan(s) – Shall be submitted with 14 calendar days of Contract execution.

3 Compaction Tests (Multiple submittals as project progresses)

4 Backfill Proctor Data (ASTM D698)

5 Soil Classifications (Multiple submittals as project progresses)

6 Incidental Concrete Mix Designs (Multiple submittals as project progresses)

7 Seeding Mix

8 Landscaping - Installer Qualification Data

9 Landscaping – Planting Schedule

10 Landscaping - Material test reports for surface soil and imported topsoil

11 Landscaping - Maintenance Plans

12 Landscaping - Maintenance Logs

13 Seeding, Seed Certifications

14 Seeding, Contractor's Installation and Maintenance Records

15 Geotextile

16 Filter Fabric (Drainage)

17 Fencing including gates and accessories

18 Underground electrical conduit, fittings and junction boxes

19 Tennis court nets, posts, and accessories

20 Water Fountain

21 Bioretention pond soil media

22 Bioretention pond underdrain pipe and observation well risers

23 Tennis Court Surfacing

\*\* - Shall be submitted within 14 calendar days from the date that the Contract is fully executed.

1.3. Resubmission -Change or correct submittals as required by the City project manager or City's consultant.

1.4. City Procedures - City's Review: Submittals will be reviewed with reasonable promptness. Submittals will be stamped by the City with one of the five following actions:

1.4.1. "Approved" indicates approval with no exception taken and the plan of work shown may proceed. However, the City's approval of any submittal shall not relieve the Contractor from the responsibility of complying with all requirements of this Contract, including the obligation to provide submittals that are accurate and complete. The City assumes no responsibility for figured dimensions on shop drawings. In addition, the City assumes no responsibility for concrete compression strength tests even after the mix design has been approved.

1.4.2. "Approved as Noted" indicates approval subject to the noted corrections. Ordering or fabrication of work shown may proceed on the basis of corrections indicated.

1.4.3. "Correct and Resubmit" indicates that additional information or changes (as noted) are required prior to taking further action. Corrections shall be made to the submittal and it shall be resubmitted. Ordering or fabrication of work shall not proceed.

1.4.4. "Disapproved" indicates information provided reveals that submittal does not conform to the contract requirements. Submittal conforming to the contract requirements shall be submitted for approval.

1.4.5. "No Action Taken" indicates one of the following: Submittal incomplete and a proper review cannot be performed, Insufficient copies submitted, Transmittal form incomplete, Contractor's certificate approving submittal not signed or missing, Submittal not required and the contract documents do not require the City to take action on this item, and Other causes or reasons as noted.

1.5. Colors – Not Used

1.6. Changes After Approval – Contractor shall not make any changes in submittal marked "Approved" or "Approved as Noted" without obtaining the prior written consent of the City. If such written consent is obtained, revise the submittal to show fully the altered parts of the work and resubmit according to the procedures specified herein. State on resubmitted plans that the work shown supersedes and voids identified parts of the same work previously shown. Give full identification on the drawings previously approved by the City and the date of such action.

1.7. Proceeding without Approval - Proceeding with any construction and ordering or fabricating materials before all relevant drawings have been "Approved" or "Approved as Noted" shall be done at the Contractor's sole risk.

1.8. Submittals from other Previous City Projects or from other City Contracts - Using "Approved" Submittals from other City projects or other City Contracts shall not be a basis for approval for this specific Contract.

End of Section

## Section 01500

### Temporary Facilities

1.1. Section includes temporary utilities, temporary sanitary facilities, staging and storage, protection of installed work, job site office, and protection of property, employees, and general public.

1.2. Related Sections – Not Used

1.3. References (latest Edition and Errata) – Not Used

1.4. Quality Assurance – Not Used

1.5. Submittals – Not Used.

1.6. Use Charges: No cost or usage charges for temporary services or facilities are chargeable to the City. Cost or use charges for temporary services or facilities or for operation of permanent utilities shall not be accepted as a basis of claims for an increase in the contract sum.

1.7. Use of Existing Facilities – Contractor shall not use City existing buildings/parking garages for storage, vertical transportation, toilets, or other construction requirements.

1.8. Temporary Electricity and Lighting -Contractor shall arrange for power and lighting and pay costs for service and power used.

1.9. Temporary Water - Contractor shall arrange for water for construction purposes and pay costs for installation, maintenance and removal, and service charges for water used.

1.10. Temporary Sanitary Facilities - Contractor shall arrange and pay for toilet facilities and maintain those facilities in accordance with the public health authority having jurisdiction.

1.11. Staging and Storage Areas - Contractor shall arrange and pay any associated costs for stage and storage areas. The City shall not be responsible for designating any staging and storage areas.

1.11.1. Use of the street or right of way for staging or storage shall be coordinated with the City of Roanoke Transportation Department. The City of Roanoke Parks and Recreation Department shall not coordinate such effort.

1.11.2. Use of a City park for staging and storage shall be coordinated with the City of Roanoke Parks and Recreation Department. The City of Roanoke Engineering Department shall not coordinate such effort.

1.11.3. Use of a City parking garage for staging and storage shall be coordinated with the City of Roanoke / Hotel Roanoke parking services. The City of Roanoke Engineering Department shall not coordinate such effort.

1.11.4. Contractor shall provide approved construction fencing for protection of the public as a part of the work as required.

1.12. Protection of Installed Work - Contractor shall provide temporary and removable protection for installed products as required. Contractor shall prohibit traffic from landscaped areas.

1.13. Protection of Property, Employees, and General Public

1.13.1. Contractor shall provide fences, planking, bridges, bracing, sheeting, shoring, lights, barricades, and warning signs as necessary to protect City's property, adjacent property, employees, and general public, and comply with applicable federal, state, and local regulations as required.

1.13.2. Trees, Vegetation, and Pavement: Protect from damage existing lawns, trees, and shrubs to remain and existing fences, roads, walks, and curbs not indicated to be removed. Repair or replace damage caused by operations under this contract.

1.14. Removal

1.14.1. Completely remove temporary facilities when their use is no longer required. Repair and clean areas damaged by temporary installations.

1.14.2. Restore permanent facilities used for temporary services to their original condition.

1.15. Job site office - The contractor shall be required to have a job site office or trailer. It is recommended that the Contractor use a quiet generator to power the office as opposed to a temporary electrical connection. If the Contractor elects to use a temporary electrical connection, the Contractor shall be responsible for obtaining and paying for the building permit.

2. Products

2.1. Safety Fence as manufactured by Harris Industries, Inc, 5181 Argosy Avenue, Huntington Beach, CA 92649 (Telephone 800-222-6866) or approved equal. Supplier identified herein is provided to impart the quality of product desired by the City and is not intended to restrict competition. Bidders are not limited to the supplier designated.

The City of Roanoke will not prequalify suppliers prior to the submission of bids. Safety fence manufacturer proposed by Contractor must comply with the specifications stated herein. Approval of qualified suppliers will be determined at the drawing submittal phase and is at the sole discretion of the City.

2.1.1. High Density Polyethylene with mesh size. Finish: Bright Orange.

### 3. Execution

3.1. Safety Fence – Installed as shown on plans and in accordance with manufacturer's recommendations.

End of Section

## SECTION 02005 – GENERAL SITEWORK REQUIREMENTS

### PART 1 – GENERAL

#### 1.1 RELATED DOCUMENTS:

The provisions of the Contract Documents apply to the work of this section.

#### 1.2 GENERAL REQUIREMENTS:

A. Scope of Work: The work consists of providing all protection of monuments and bench marks, final grading, siltation control, stormwater management, storm sewer system, water system, sanitary sewer system, topsoiling, fertilizing, seeding of grass areas, curb and gutter, pavement, fencing, and related items necessary to complete work shown on drawings and specified here.

##### B. Monuments and Bench Marks:

1. Maintain carefully all monuments, property corners, and bench marks, and other reference points; if disturbed or destroyed, the Contractor shall have same replaced by a Civil Engineer or Land Surveyor registered in the State of Virginia, at his expense.

##### C. Laying Out of the Work:

1. The Contractor and/or Subcontractors affected shall, immediately upon entering project site, locate all general reference points, take such action necessary to prevent their destruction; lay out work and be responsible for all lines, elevations, measurements of building, grading, paving, utilities, and other work of the Contract. Exercise proper precaution to verify figures shown by the drawings before laying out work of the Contract. Exercise proper precaution to verify figures shown by the drawings before laying out work, be responsible for any error resulting from failure to exercise such precaution.

2. When a Licensed Land Surveyor or Civil Engineer is not regularly employed by the Contractor, or Subcontractors as the case may be, Contractor shall engage such person for establishing bench marks, important key elevations and all major lines of work.

D. Sheeting, Shoring and Bracing: The Contractor is responsible for providing, erecting and removing all sheeting, shoring and bracing necessary to complete the work in a safe and expeditious manner. Provide and maintain adequate pumping equipment as necessary to keep excavations dry.



E. Standard References:

1. Any materials, equipment, or workmanship specified by reference to the number, symbol, or title or any specific Standard shall comply with the latest edition or revision thereof and any amendment or supplement thereto in effect on the date of the Invitation to Bid, except as limited to type, class or grade, or modified in these specifications.

2. Contractors must secure or review the pertinent City of Roanoke, Virginia Department of Transportation Specifications, and the Virginia Department of Health regulations, details and regulations as pertain to the work.

F. Asbestos: No materials or products used in this work shall be or contain asbestos.

1.3. OCCUPANCY OF THE PREMISES:

A. Upon signing the Contract, the Contractor shall occupy the Site for construction purposes and shall be responsible for protection and maintenance of the immediate construction site during the construction period. Care shall be taken to protect the property and utilities. Damages shall be repaired by and/or cost thereof borne by the Contractor.

B. Erect and maintain any and all safeguards as may be necessary for the protection of the public, employees and persons, including enclosures, fences, temporary sidewalks, maintenance of lights, guards and signs that shall be required by jurisdiction involved.

1.4 EASEMENTS:

A. Verification of Easements: The Contractor shall verify the acquisition of all off-site easements prior to the start of any off-site construction. This shall be done by contacting the Architect.

B. Easement Restoration: The Contractor shall restore all off-site easements in accordance with the terms of the easement agreement. He shall clean up all rubbish and surplus materials, and leave the easement in presentable shape at least comparable with the condition in which it was before the construction work began.

1.5. MAINTENANCE OF TRAFFIC:

A. At his expense, the Contractor shall provide for the maintenance of vehicular and pedestrian traffic as required by the City of Roanoke, and Virginia Department of Transportation.

#### 1.6. CORRELATION OF PROJECT MANUAL & DRAWINGS:

A. The Contractor shall examine and be familiar with the Site, drawings and Project Manual, Addenda (if issued), construction notes and other instructions, and shall at once report to the Engineer any error, inconsistency, or omission which he may discover. He shall make such field checks as he deems necessary to verify topography and other data. The Contractor shall be held responsible for any error, inconsistency, or omission not called to the immediate attention of the Engineer.

B. Where a variance exists between these Project Manual specification sections and other standards and specifications referred to herein, these specifications shall govern. In the event of uncertainty as to interpretation, the Engineer shall be notified immediately, and his decision shall be binding.

#### 1.7. INSPECTION AND APPROVAL:

A. The Contractor shall notify the Owner or Engineer three (3) days prior to the beginning of any Sitework.

B. Inspections under this contract will be by the City of Roanoke Department of Parks and Recreation Representative, City of Roanoke Department of Community Development Inspectors or the Engineer.

C. Prior to final inspection of the completed Sitework for acceptance by the Owner and the Engineer, the Contractor shall have obtained from the Roanoke City Department of Community Development Inspector a report of their separate final inspection report which shall be provided to the Owner and the Engineer. Only after receipt of the report by the Engineer will the Owner's final inspection be scheduled.

D. All work in the dedicated utility easements will be monitored and inspected by the Roanoke City Inspectors.

#### 1.8. PRE-CONSTRUCTION CONFERENCE:

A. A pre-construction conference will be held at a time and place designated by the Roanoke City Parks and Recreation Department and/or Owner to discuss job procedures, schedules and other matters with the Contractor and his superintendent prior to construction after the Contract has been awarded.

#### 1.9. UNDERGROUND CONSTRUCTION & EXISTING FACILITIES:

A. Information as to existing underground construction and sub-surface conditions is shown in accordance with the best available data. All must be investigated or verified in the field prior to, or upon construction by the Contractor. Location and elevation of points of pick-up or discharge of sanitary or storm sewer connections shall be verified prior to construction by the Contractor.

#### 1.10. EXISTING UTILITIES:

A. The extent, existence and locations of underground or other utilities, and other construction indicated on the plans are not guaranteed, and shall be investigated and verified in the field by the Contractor. Contractor shall notify "Miss Utility" prior to beginning work. Work in the vicinity of existing structures and utilities shall be carefully done by hand. The Contractor shall be held responsible for any damage to, and for maintenance and protection of, existing facilities and structures.

B. Any existing structures, utility poles, lines, services, or other appurtenances located in, or affected by, the construction of the work herein shall be adjusted, moved or relocated as required. The work shall be performed by the Contractor of Utility Owner with arrangement and payment for said work being borne by the Contractor.

#### 1.11. SAFETY:

A. Except as thereafter provided, the current edition of Rules and Regulations Governing Construction, Demolition and all Excavation as adopted by the Safety Codes Commission of the Commonwealth of Virginia, and all provisions therein contained are hereby included as a part of these Specifications. (A manual setting forth these rules and regulations has been issued by the Department of Labor and Industry and may be obtained by writing the office at P. O. Box 1814, Richmond, VA 23214.)

B. Proper safety precautions shall be exercised in all phases of work. The Engineer shall require the use of any techniques or devices necessary to protect both workmen and the general public from injury or loss of life. It shall be the responsibility of the project foreman or superintendent to recognize and correct hazardous conditions whether or not he has received previous direction from the Architect.

C. The current provisions of Article II of the Rules and Regulations, Governing Construction, Demolition, and all Excavation as adopted by the Safety Codes Commission, Commonwealth of Virginia shall apply, in their entirety, to all excavation work occurring in conjunction with the use of these specifications.

D. Personal Protection: The provisions of Article VII of the aforementioned Rules and Regulations shall apply to insure the protection of workmen from hazards created by conditions to which workers are exposed. In addition to exercising all practical control to eliminate such hazards, or reduce them to a minimum, The Contractor shall also issue personnel equipment such as hard hats, and safety goggles where indicated by working conditions.

E. Explosives: Explosives may not be used on this project.

F. Public Protection: The provisions of Article X of the Rules and Regulations Governing Construction Demolition, and all Excavation shall apply to insure adequate and safe protection to the general public whenever construction work is readily accessible to the public.

1.12. SILTATION AND EROSION CONTROL:

A. Refer to Siltation and Erosion Control Section 02175.

END OF SECTION 02005

## SECTION 02060 – DEMOLITION AND REMOVAL

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS:

A. The provisions of the Contract Documents apply to the work of this section.

#### 1.2 DESCRIPTION OF WORK:

A. The extent of site demolition work to be provided is shown on drawings.

#### 1.3 JOB CONDITIONS:

A. Condition of Structures: Owner assumes no responsibility for actual condition of existing structures to be demolished. Conditions existing at time of inspection for bidding purposes will be maintained by Owner in so far as practicable. However, variations within structure may occur by Owner's removal and salvage operations prior to start of demolition work.

B. Partial Removal: Items of salvageable value to Contractor may be removed as work progresses. Salvaged items must be transported from site as they are removed. Storage or sale of removed items on site will not be permitted.

C. Explosives: Use of explosives will not be permitted.

D. Traffic: Conduct demolition operations and removal of debris to ensure minimum interference with roads, streets, walks, and other adjacent occupied or used facilities. Do not close or obstruct streets, walks or other occupied or used facilities without permission.

E. Protections: Ensure safe passage of persons around area of demolition. Conduct operations to prevent injury to adjacent buildings, structures, other facilities, and persons.

1. Provide, install, and maintain safety barriers in accordance with the requirements and provisions of the current local, state, and federal regulations.

F. Damages: Promptly repair damages caused to adjacent facilities by demolition operations at no cost to Owner.

G. Underground Construction and Existing Facilities:

1. Information as to existing underground construction and sub-surface conditions such as rock, unstable material or ground water is shown in accordance with the best available data. All must be investigated or verified in the field prior to, or upon construction by the Contractor. Location and elevation of points of pick-up or discharge of sanitary or storm sewer connections shall be verified prior to construction by the Contractor.

#### H. Existing Utilities:

1. The extent, existence and locations of underground or other utilities and other construction indicated on the plans are not guaranteed, and shall be investigated and verified in the field by the Contractor. Work in the vicinity of existing structures and utilities shall be carefully done by hand. The Contractor shall be held responsible for any damage to, and for maintenance and protection of, existing facilities and structures.

2. Any existing structures, utility poles, lines, services or other appurtenances located in, or affected by, the construction of the work herein shall be adjusted, moved or relocated as required. The work shall be performed by the Contractor or Utility Owner with arrangement and payment for said work being borne by the Contractor.

## PART 2 – PRODUCTS (NOT USED)

## PART 3 - EXECUTION

### 3.1 UTILITY SERVICES:

A. Maintain existing utilities indicated to remain, keep in service, and protect against damage during demolition operations.

B. Do not interrupt existing utilities serving occupied or used facilities, except when authorized in writing by authorities having jurisdiction. Provide temporary services during interruptions to existing utilities, as acceptable to governing authorities and the Owner.

### 3.2 POLLUTION CONTROLS:

A. Use temporary enclosures, and other suitable methods to limit dust and dirt rising and scattering in air to lowest practical level. Comply with governing regulations pertaining to environmental protection.

B. Do not use water sprinkling when it may create hazardous or objectionable conditions such as ice, flooding, and pollution.

C. Clean adjacent structures and improvements of dust, dirt, and debris caused by demolition operations, as directed by Engineer. Return adjacent areas to condition existing prior to start of work.

### 3.3 DEMOLITION:

A. Demolish existing buildings, fencing, posts, utility lines, concrete slates, footings and remove from site. Use such methods as required to complete work within limitations of governing regulations.

B. Proceed with demolition in a systematic manner to make way for new construction indicated or as necessary to accomplish desired results.

C. Demolish concrete and masonry in small sections.

D. Break up and remove concrete slabs-on-grade, unless otherwise shown to remain.

E. Work shall be done with extreme care to prevent risk or harm to persons or property. Clear away debris to the extent that it will not interfere with work, safety, or passage.

### 3.4 FILLING VOIDS:

A. Completely fill below grade areas and voids resulting from demolition of structures.

B. Use satisfactory soil materials meeting the requirements set forth in Section 02200 of these specifications, free from debris, trash, and frozen materials, roots, and other organic matter.

C. Prior to placement of fill materials, ensure that areas to be filled are free of standing water, frost, frozen materials, roots, trash, and debris.

D. Place fill materials in horizontal layers not exceeding 6" in loose depth. Compact each layer at optimum moisture content of fill material to a density conforming to requirements for that area specified in Section 02200 of these specifications.

E. After fill placement and compaction, grade surface to meet adjacent contours.

### 3.5 DISPOSAL OF DEMOLISHED MATERIALS:

A. General: Remove from site debris, rubbish, and other materials resulting from demolition operations.

B. Burning of removed materials will not be permitted on this project.

C. Removal: Transport materials removed from demolished construction and dispose of off-site at a location as provided by the Contractor, and according to federal, state, and local regulations governing said disposal.

END OF SECTION 02060



## SECTION 02110 – CLEARING

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS:

- A. The provisions of the Contract Documents apply to the work of this section.

#### 1.2 DESCRIPTION OF WORK:

- B. In general, the items of work to be performed consist of clearing and grubbing, removal of all trees, stumps, roots and shrubs, and protection of trees to remain.

#### 1.3 CLEARING:

- A. Remove all trees and stumps from areas to be occupied by new building, roads, surfaced areas, storm sewers, sanitary sewers, water lines, playground areas, and stormwater management areas as shown on the plans. Trees outside these areas shall not be removed without permission from the Owner.

- B. All trees and stumps removed shall be taken out to a depth of two feet below the existing grade, or two feet below the excavation limits in areas to be excavated.

- C. All brush, poison ivy, stumps, wood, and other refuse from the trees shall be moved to disposal areas off the site. Disposal by burning onsite will not be permitted.

- D. The Contractor shall contact the Engineer prior to beginning of clearing operations, and shall leave and protect any trees to be left on site as directed and marked by the Engineer or Owner and in those areas of the site designated as tree protection areas on the plans

- E. Any debris left from clearing operations shall be removed from the site. No burying of stumps or other debris will be allowed on the site.

#### 1.4 PROTECTION

- A. The Contractor shall be responsible for the protection of tops, trunks, and roots of existing trees on the project site that are to remain. Existing trees on the project site that are subject to construction damage shall be boxed, fenced, or otherwise

protected before any work is started; remove boxing when directed. Do not permit heavy equipment or stockpiles within the branch spread of trees.

B. Grading around trees where excavating, filling, or grading is required within the branch spread of trees that are to remain, the work shall be performed as follows:

1. Existing trees in areas where the new finished grade is to be lowered, shall have re-grading work done by hand to elevation as indicated. Roots as required shall be cut cleanly 3" below finished grade and scars covered with tree paint.

2. In areas where trees are to remain and are included in the limits of sitework, all undergrowth and shrubs shall be removed by bush-hogging or other suitable methods.

END OF SECTION 02110

## SECTION 02175 –EROSION AND SEDIMENT CONTROL

### PART 1 – GENERAL

#### 1.1 RELATED DOCUMENTS:

A. The provisions of the Contract Documents apply to the work of this section.

#### 1.2 GENERAL:

A. The work consists of providing sedimentation collectors around storm sewer structures, protection from erosion of newly graded areas, and protection along limits of construction from erosion and sedimentation outside the construction areas by constructing and/or maintaining silt barriers.

B. Installation and maintenance of erosion control measures shall be in strict conformance with the details and specifications in the Virginia Erosion and Sediment Control Handbook, current edition and in accordance with City of Roanoke, Virginia regulations.

C. Facilities for collecting silt shall be maintained around all storm sewer structures indicated on the plans. These facilities shall be maintained in an operative condition at all times, and the Contractor shall be responsible for removing collected silt to maintain the proper operation of such facilities.

D. The Contractor is responsible for obtaining the required Land Disturbing Permit from the City of Roanoke, Virginia. A performance deposit in the form of cash escrow, cashier's check, certified check, or a letter of credit must be provided by the Contractor as security for erosion and sediment control and stormwater management facilities before a land disturbing permit will be issued.

#### 1.3 SEDIMENTATION COLLECTORS AROUND STORM SEWER STRUCTURES:

A. The sedimentation collectors around the storm sewer structures shall be constructed by the Contractor as each structure is constructed to grade.

#### 1.4 SITE EROSION CONTROL MEASURES:

A. The Site erosion control measures along the Site boundaries as shown on the plan shall be constructed and completed, 100% at all locations, before any site excavation or stripping of topsoil on the Site will be permitted.

#### 1.5 SILT AND SEDIMENTATION COLLECTOR:

A. The Contractor shall construct along the perimeter of the construction and at other locations, silt barriers according to the plan.

#### 1.6 MAINTENANCE:

A. Silt Structures, other than the detention/sediment basins, may become clogged by debris and require cleaning. If such clogging causes water to be impounded without release, cleaning shall be performed without delay.

1. Relief measures, including pumping to remove ponded water and/or posting a guard on the Site until ponding is no longer present, shall be employed until the blockage is removed and the general hazard of accidental drowning has passed. The Contractor, or such other party as may be in a position to do so, should strongly consider circulating notices to residents of the area of the existence of silt barriers, their location, and the need for parents to keep their children away from the basins.

B. The siltation and erosion control measures shall be maintained in an operative condition throughout the entire period of the construction contract.

C. The Contractor shall be responsible for removing the silt to maintain an effective silt collector. Unsightly trash and waste material accumulating shall be removed.

D. It shall be the Contractor's responsibility to perform the work in such a manner as to prevent the washing of any soil, silt or debris onto adjacent properties and he shall be held responsible for any damage incurred.

E. Upon the establishment of grass on all slopes and other seeded or sodded areas, and upon approval of the local governing authority, the collected silt and silt barriers shall be removed.

F. Maintain all siltation and erosion control measures from final acceptance of rough grading site work by Owner until project close-out.

END OF SECTION 02175

## SECTION 02200 – EARTHWORK

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS:

A. The provisions of the Contract Documents apply to the work of this section.

#### 1.2 SCOPE OF WORK:

A. The work includes the excavation, filling, backfilling, and grading indicated and necessary for the proper completion of the Project.

B. Structures and paved areas are defined (for the purpose of this section), as extending a minimum of twenty-five (25) feet beyond the structures and pavement. Sidewalks are considered structures which extend 3 feet beyond the edge of sidewalk.

#### 1.3 TESTS AND INSPECTIONS:

A. The Owner shall engage the services of a Professional Soils Engineer whose function shall be to afford complete engineering control by approval of all soils used for fill and to test the placement of all fills and all compaction where and when required.

B. The Owner's Soils Engineer shall be present as he deems necessary during all phases of the work under this Section requiring filling, compacting operations, or testing. The Owner's Soils Engineer shall provide the Engineer with written certification that fill and compaction was completed with accepted materials in accordance with the specifications, and give a professional opinion regarding shrinkage or settlement of fill and safe load bearing capacity of fill.

C. Submit four (4) copies of all required reports and recommendations and/or opinions of the Soils Engineer to the Engineer.

### PART 2 - PRODUCTS

#### 2.1 FILL MATERIAL:

A. Where fill is required to raise the existing grades to the elevations indicated on drawings, such fill shall be of earth, furnished, transported, placed and compacted as specified. To the extent that on site soil is not suitable for use as fill, or cannot be made suitable at Contractor's expense, the Contractor shall be responsible

for importing, transporting and providing all additional suitable fill as may be required for this project from off site. The quality of all fill material shall be tested and approved by the Owner's Soils Engineer before placement. Soil material to be used as fill shall be submitted to the Soils Engineer one week prior to its placement to allow sufficient time for necessary tests.

B. On-site soils, excluding topsoil, may be used as fill, subject to approval by the Soils Engineer. Soils classified as CH, OL, OH, or PT based on the Unified Soil Classification System shall not be used for structural fill. Material for fill shall be free from debris, waste, frozen materials, roots, wood or other organic material. Fill shall contain less than 2% vegetation-organic materials by weight.

C. Any isolated limbs, roots, or other similar organic materials that are greater than approximately two (2) inches in diameter shall be removed from all fill areas and properly disposed of offsite.

D. Fill shall not contain stones larger than six (6) inches maximum dimension. Stones larger than 3 inches maximum dimension shall not be used in the upper 12 inches of all sub-grades.

E. In fill areas containing rock which meets the size requirements stated above, these rocky materials shall be properly mixed with sufficient fines to "choke" any voids. Nesting of rock shall be prohibited.

F. Fill material shall have a liquid limit less than 50 and a plasticity index less than 25. Blend on-site soils to achieve these limits as necessary.

## PART 3 - EXECUTION

### 3.1 STRIPPING TOPSOIL:

A. The Contractor shall strip the topsoil for its full depth from the entire construction area and stockpile on Site where it will not interfere with the building construction, the utility work and the general sitework. Stripped topsoil shall be free from clay, large stones and debris. Use topsoil exclusively for finish grading of grass areas under the contract.

B. Remove heavy growths of grass and root mat from areas before stripping.

### 3.2 ROUGH GRADING:

A. Rough grading of all areas within the Project, including cut and fill sections and adjacent transition areas, shall be reasonably smooth, compacted and free from irregular surface changes. The degree of finish shall be that ordinarily obtainable from either blade-grader or motor patrol except as otherwise specified. The finished

subgrade surface generally shall be not more than 0.1 feet above or below the established grade or approved cross section, with due allowance for topsoil.

B. The tolerance for areas within the playing area of the tennis courts shall not exceed 0.10 feet above or below the indicated grade. All ditches, swales and gutters shall be finished to drain readily. Unless otherwise indicated on drawings, the subgrade shall be evenly sloped to provide drainage away from tennis courts in all directions at a grade not less than 1/4 inch per foot. Provide roundings at top and bottom of banks and at other breaks in grade.

C. Upon completion of the required cuts within structural areas and prior to placing any fill, and in the presence of the Soils Engineer, proofroll areas below structures with a 20 to 25 ton rubber tired roller or a loaded 10-wheel tandem dump truck during earthwork operations to locate all unsuitable material. Make at least four proofroll tests. Proofrolling shall not be attempted during and following wet weather conditions or if shallow groundwater conditions develop. Should any unsuitable sub-soil be encountered below pavement or structures, remove such materials as directed by the Soils Engineer and backfill with suitable fill material to subgrade level as part of the Contract price.

D. The Contractor shall exercise extreme caution in moving and routing earthmoving equipment and other heavy construction equipment through the site to avoid over-compacting or "pumping" of the soil material.

E. Suitable excavated material may be used for fills and backfills. Deficient quantity of suitable fill material shall be brought on site by the Contractor at his expense. Excess excavated material shall be properly disposed of off site at Contractor's expense.

### 3.3 SPRINGS:

A. Should any springs or running water be encountered in the excavation, the Engineer shall be notified and the Contractor shall provide free discharge of it by trenches and drain to an appropriate point of disposal as directed. If permanent provision must be made for disposal of water other than as shown, the contract price will be adjusted. The Contractor shall provide temporary drainage facilities to minimize the flow of rain water onto adjacent property. Any damage to property as a result of construction operations shall be rectified by the Contractor at the Contractor's expense.

### 3.4. FILLS:

A. Remove all debris subject to termite attack, rot or corrosion, and all other deleterious materials from areas to be filled. Prior to placing fill material, the original surface of the ground shall be scarified to a depth of 6" and the moisture content of the loosened material shall be such that it will readily bond with the first layer of fill material.

Unstable subsoil shall be removed to a depth necessary to reach an established material before placing fill material as part of the Contract price.

B. Place the material in successive horizontal layers in loose depths as specified, for the full width of the cross section. Deposit fill in layers not more than six (6) inches in loose thickness when using heavy compaction equipment. Deposit fill in layers not more than six (6) inches in loose thickness when using hand-operated tampers or light compaction equipment. Fills placed over existing slopes shall be benched into the existing slope to prevent shear planes.

C. All fill soils must be approved for use by the Soils Engineer prior to placement and compaction. The moisture content of the soils shall be at or within three (3) percentage points of their optimum moisture content. Each fill layer shall be moistened or aerated to obtain the required moisture content.

E. Compact each layer of fill beneath exterior paved construction areas and structures and all fill slopes within the site by rolling or tamping to at least 95% of the laboratory maximum dry density as determined by the Standard Proctor method (ASTM D 698). Compact each layer of fill beneath level lawn or planting areas to 90% of the maximum dry density. Re-compact the top eight inches of final soil subgrade in cut areas to 95% of the maximum dry density. Compaction shall be accomplished by the use power rollers, sheepsfoot rollers, machine tampers, or other mechanical equipment approved by the Soils Engineer. Do not deposit any fill on a subgrade that is muddy, frozen, or that contains frost.

E. Do not place, spread or roll fill material during unfavorable weather conditions. Do not resume operations until moisture content and fill density meet requirements specified. Soil material that has been removed as too wet to permit compaction may be stockpiled or spread to dry. When moisture content is reduced to specified value, soil material may be used as fill.

F. Portions of fill which do not meet the compaction requirements shall be reworked, re-compacted and re-tested until the required compaction is achieved.

G. During the operation of making fills adjacent to the building and beneath structure areas, an approved type of roller shall be in continuous operation. At no time shall any piece of equipment engaged for compaction purposes be used for other than compaction of material and all earth moving operations shall cease for any reason that the compaction equipment is stopped.

H. Prior to the beginning of any excavation whatsoever, the grading contractor shall have on the Site, an approved type roller which he shall, in the presence of the Owner's Representative, remove any inspection plates necessary to verify the presence of fluids or ballasts for weight. This piece of equipment shall be



demonstrated and proven in satisfactory condition together with any necessary towing equipment prior to making any fills, stripping any topsoil or any grading whatsoever.

I. Stockpiled topsoil shall be spread on the areas to be seeded. Fine grading shall be to such tolerances that will allow the cutting of the lawn areas by normal tractor-drawn mowing equipment without damage to the turf and without ponding or holding water.

J. Prior to substantial completion of the project, the Contractor shall fill-in all settled areas around the entire perimeter of the improvements, with topsoil. Re-seed and establish a stand of grass, in the filled-in areas, as necessary.

### 3.5 TENNIS COURT SUBGRADE:

A. Subgrade within the limits of the tennis courts shall be compacted to 97% of the maximum dry density as determined by the Standard Proctor method (ASTM D 698). Subgrade shall be true to line and grade and shall be proof rolled with a fully loaded dual axle dump truck under the supervision of the Soils Engineer. Any areas that pump or rut shall be removed and recompacted as directed by the soils engineer.

### 3.6 PROTECTION:

A. Protect newly graded areas from the actions of the elements. Any settlement or washing that occurs prior to acceptance of the work shall be repaired, and grades re-established to the required elevations and slopes. Fill to required subgrade levels any areas where settlement occurs. Protect trees to remain, and at all areas of the Site where construction operations are in progress provide protection for the safety of occupants of the existing facilities.

B. Graded areas shall be kept free of standing water at all times.

C. All fill areas shall be sufficiently sloped and properly sealed with a smooth drum roller at the end of each work day.

D. At areas to be paved, base stone and pavement shall be placed immediately upon completion and approval of the final subgrade to preclude deterioration of the subgrade due to adverse weather.

E. Notify Engineer immediately upon observation of any sinkhole activity during construction. Do not proceed with grading work in the affected area without approval from the Engineer.

### 3.7 ROCK EXCAVATION:

A. When rock is encountered in grading, it shall be removed to depths below sub-grade as described herein. Sub-grade is the uppermost part of an excavation or the top surface of a fill or backfill immediately below sub-base, drainage fill, or topsoil materials.

1. Under asphalt and concrete surfaced areas, to 12" under the sub-grade for such areas.
2. Under lawn and planted areas – 12" minimum below sub-grade.
3. Under building - 36" below building subgrade.

B. Blasting will not be permitted

C. All excavation for this Project shall be unclassified and no separate measurement and payment will be made for rock excavation. It shall be considered as part of the lump sum bid for the project. This is applicable to all excavation for all trades.

END OF SECTION 02200

## SECTION 02210 - PROJECT CLEAN UP, RESTABILIZATION AND RESTORATION

### PART 1 – GENERAL

#### 1.1 RELATED DOCUMENTS:

A. The provisions of the Contract Documents apply to the work of this section.

#### 1.2 DESCRIPTION:

A. This section includes clean-up, restabilization and restoration required to prevent accidents, to protect all work in place, restabilize and restore all disturbed areas, removal of all evidence of construction activities and to effect completion of the project in an orderly manner, all to the satisfaction of the Owner.

### PART 2 – PRODUCTS (NOT USED)

### PART 3 - EXECUTION

#### 3.1 CLEAN-UP:

A. Construction clean up shall proceed as construction progresses and shall consist of the removal of all mud, oil, grease, soil, gravel, trash, scrap debris and excess material that are unsightly or may cause the tripping or sliding of workmen, or equipment. All cleaning materials and equipment used shall be selected and employed with care to avoid scratching, marring, defacing, straining or discoloring the surfaces cleaned.

B. Immediately prior to the Contractor's written request for final inspection of the project or any portion thereof, perform final clean up.

C. In addition to the normal "broom clean" requirements, the exposed surfaces of the following materials shall be cleaned as listed herein:

1. Asphalt Paving: Remove mud, dirt, oil, and trash and hose down if required.
2. Other Surfaces: Remove all blemishes, leave clean, uniform and dust free.

3. Premises & Site: Remove all trash, debris, and surplus excavation material.

D. No items shall be left or discarded elsewhere on the site. Items that are to be discarded shall be disposed of legally off-site. Leave premises "broom clean".

### 3.2 RESTORATION AND RESTABILIZATION:

A. All areas disturbed by the Contractor's operations including staging and stockpiling areas, construction strips, access roads, and areas within the right of way shall be restored and restabilized as specified herein.

B. Final restoration and restabilization including seeding, sodding, landscaping and paving when season permits, shall proceed immediately after construction activity is completed in a given area. The Contractor shall provide topsoil where needed to establish lawn and planting areas to a healthy stable condition. The Contractor shall tear down and remove all temporary construction facilities constructed by the Contractor and leave the site in an orderly condition as required by the Contract Documents.

C. Preserve public and private signs, markers, guardrails and fences and maintain their original condition unless written permission is obtained for their removal and replacement. Remove such conflicting facilities when grading operations begin, store in a manner to keep them clean and dry and re-erect at such new locations to prevent damage to underground or overhead utility structures. Replace damaged items at no cost to the owner.

D. Gravel surface and shoulders shall be restored to original condition. Do not reuse shoulder material if contaminated by foreign material. In such case, replace with new material of same quality and gradation. Materials and methods of construction shall be in accordance with jurisdictional requirements and with applicable permits secured for the contract. Areas adjacent to shoulders, if left unstable shall be surfaced and stabilized with gravel.

E. Clean the Project site, yard and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste materials, litter and foreign substances. Sweep paved areas broom clean. Remove petro-chemical spills, stains and other foreign deposits. Rake grounds that are neither planted nor paved, to a smooth even-textured surface.

### 3.3 DISPOSAL OF WASTE MATERIALS:

A. Construction waste materials shall be disposed of legally off-site or in an area covered by a current grading or sediment control permit.

B. Waste materials disposed of in an unauthorized location shall be removed by the Contractor and the area shall be restored to its original condition at no additional cost to the Owner.

C. Removal of Condemned Materials:

1. Material brought upon the grounds or selected for use in the work which has been determined by the Architect or Engineer to be unsuitable or not in conformity with the Contract Documents shall be removed from the vicinity of the work without delay and disposed of in an approved area.

END OF SECTION 02210

## SECTION 02513 – BITUMINOUS PAVING

### PART 1 – GENERAL

#### 1.1 RELATED DOCUMENTS:

A. The provisions of the Contract Documents apply to the work of this section.

#### 1.2 DESCRIPTION:

A. The work consists of providing pavement for roadways, parking lots, asphalt walks, paved play areas, and all related items necessary to complete the work shown on the drawings and specified herein.

#### 1.3 STANDARDS AND SPECIFICATIONS:

A. Methods and materials used in construction of the pavement shall conform to current Virginia Department of Transportation Road and Bridge Specifications. No bank run gravel shall be permitted for use as a base material.

### PART 2 – PRODUCTS

#### 2.1 AGGREGATE:

A. Aggregate shall conform to Virginia Department of Transportation Specification 209, Type I, Size 21B compacted aggregate, or as otherwise specified on the plans.

#### 2.2 BITUMINOUS PAVING:

A. Bituminous materials shall conform to Virginia Department of Transportation Specification 211 and as specified on the plans.

B. Provide plant-mixed, hot-laid asphalt-aggregate mixture complying with ASTM D 3515 and in accordance with Virginia Department of Transportation, Road and Bridge specifications, latest edition.

## PART 3 – EXECUTION

### 3.1 PATCHING:

A. Where existing streets, roads, driveways, or other pavements have been cut and are otherwise included in new construction, they shall be repaired as follows:

1. The areas shall be backfilled and compacted in accordance with Section 02200.
2. All existing curbs and gutter, sidewalks, base course, and sod shall be replaced to appropriate line and grade to preclude the ponding of water, with construction similar in design and material as approved, or as herein specified.
3. Wearing surface shall be replaced with 1-1/2 times the existing thickness of bituminous concrete, the designation of which shall be SM-9.5, in accordance with Virginia Department of Transportation specifications.
4. Existing areas to be patched lying within right-of-ways shall be repaired in strict accordance with the Virginia Department of Transportation Standards and Specifications for such work.

### 3.2 SUB-GRADE PREPARATION:

- A. Subgrade for paved areas shall be prepared in accordance with Section 02200.

### 3.3 BASE CONSTRUCTION:

A. The base material shall not be dumped in piles, but shall be spread over the and thoroughly compacted.

B. Compacted thickness of base shall be provided in all paved areas as noted on plans.

C. The base course shall be brought to true line and grade and compacted to a minimum of 100% compaction as required in the current Virginia Department of Highways and Transportation "Road and Bridge Specifications" grading scale. The finished surface of the base course shall be true to line and grade and shall have no more than 1/4" deviation in 10' as measured by a 10' straight edge.

D. The Owner's Geotechnical Engineer shall perform compaction tests on the base course as he deems appropriate. Any areas not meeting the required minimum

shall be re-rolled and the Contractor shall furnish, at his expense, any additional tests required for testing of areas which fail. All base material shall be maintained until such time as placing pavement true to line and grade.

### 3.4 BITUMINOUS PAVING FOR TENNIS COURTS:

- A. Paved areas shall consist of stone base and bituminous concrete as shown on plans.
- B. Liquid asphalt prime coat, grade MC-70 shall be applied over the compacted aggregate base course at the rate of 0.3 gallons per square yard of surface. Prime coat shall be required beneath all pavement sections consisting of less than four (4) inches total pavement thickness.
- C. The prime coat shall be applied at the rate specified above and shall not be applied during periods of damp weather. Prime coat shall be allowed to cure before placement of any bituminous concrete. During the placement of the base or top coat, should any prime begin to "pick up", it shall be sanded or chipped at the Contractor's expense.
- D. The face of all gutters and concrete structures abutting bituminous concrete pavement shall be painted with a heavy coat of asphaltic material prior to the placement of any bituminous concrete pavements.
- E. Bituminous concrete pavements shall be laid according to the current Virginia Department of Transportation "Road and Bridge Specifications".
- F. The Contractor, at his expense, shall furnish and test all paved surfaces in the presence of a representative of the Owner. Testing shall be required before payment is made of this item.
- G. Surface Tolerances: All pavements shall be tested with a 10' straight edge and any pavement having irregularities of more than 1/16" when tested shall be corrected. Any corrections required to be made shall show an end result of a finished pavement without patches and/or irregularities. Corrected pavement showing areas of patching or otherwise poor workmanship will be required to be resurfaced at the expense of the Contractor.
- H. Any pavement found to be 1/2" more or less than the required compacted thickness, shall be removed and replaced at the Contractor's expense.
- I. Weather Limitations: Bituminous concrete shall not be placed on any wet surface, when the atmospheric temperature is below 40°F. in the shade or when weather limitations otherwise prevent the proper handling or finishing of the bituminous mixtures. Bituminous concrete surface and



binder courses shall not be placed between the dates of November 15 and April 1 without the consent of the Architect.

END OF SECTION 02513

## SECTION 02515 – SITEWORK CONCRETE

### PART 1 – GENERAL

#### 1.1 RELATED DOCUMENTS:

A. The provisions of the Contract Documents apply to the work of this section.

#### 1.2 DESCRIPTION:

A. This Section includes concrete for exterior sitework only.

### PART 2 - PRODUCTS

A. Portland Cement shall conform to ASTM “Standard Specifications for Air-Entraining Portland Cement” C175-43T.

B. Coarse Aggregate: Hard, durable, uncoated crushed stone conforming to ASTM C-33-52-T.

C. Sand: Clean, hard, durable, uncoated grains free from silt, loam and clay.

D. Water: Shall be clean and free from oils, acid, alkalies, organic materials and other deleterious substances.

E. Concrete for concrete sidewalks, paving, curb and gutter, equipment pads, and other miscellaneous sitework concrete shall be air-entrained with a 28-day comprehensive strength of 3,500 psi, Class A-3 concrete. Virginia Department of Transportation “Road and Bridge Specifications”, Section 217, Portland Cement Concrete shall apply to all concrete work for curb and gutter and sidewalks.

F. Reinforcing Bars: New billet steel, ASTM A615, Grade 40.

### PART 3 - EXECUTION

#### 3.1 CURB AND/OR GUTTER:

A. Sub-grade shall be brought to proper lines and grades and compacted as specified in Section 02200.

B. Curbs shall meet all requirements of the City of Roanoke and the Virginia Department of Transportation Specifications and shall be poured and constructed in a workmanlike manner.

C. Any Curb having a radius of 300' or less shall be considered radial curb and shall be constructed using wooden or flexible forms. Curb shall be poured in approximately 10' lengths with no section less than six (6) feet.

D. All exterior concrete shall be cured with an approved membrane spray, sanding and continuous wetting, or covered with an approved material.

E. Tolerances for all exterior concrete curb and gutter shall be as follows:

1. All concrete which is out of shape, plane, or design 1/4" or more when tested with 10' straight edge shall be removed and replaced.
2. Any concrete curb that becomes chipped, spalled, cracked or otherwise damaged prior to final acceptance of the project shall be removed and replaced at the Contractor's expense. No patching shall be permitted. (Portions of sections may be replaced using an epoxy type method only if approved by the Architect.)

### 3.2 SIDEWALKS:

A. Sidewalks shall be one course construction, 4" in thickness unless otherwise indicated on drawings. Provide 1/2" expansion joints not more than 30 feet apart. Provide expansion joints where sidewalks abut curb. Pre-molded expansion strips shall extend for the full width and depth at required locations. Walks shall be scored at five (5) foot intervals for their full width. Provide brushed finish. All pedestrian walks shall be reinforced with one layer of 6x6-W1.4 x W1.4 WWF, broken at all joints. Equipment pads shall have a minimum thickness and reinforcing as indicated on the plans.

B. All concrete sidewalks shall be poured on compacted granular material. The granular material shall be a crushed stone which will pass a 3/4" sieve, but will be retained on a No. 4 sieve. The stone shall have a minimum thickness under the walk or pad as shown on the plans.

C. When sidewalk is poured adjacent to curb, expansion joints, if practical, shall coincide.

### 3.3 WEATHER:

A. All concrete poured in cold weather or between the dates of November 1 and April 1 shall be poured in accordance with the Virginia Department of Transportation limitations "cold weather concrete" and shall be protected according to

these specifications. Before any concrete shall be poured, necessary material for protection of this concrete shall be on the Site.

END OF SECTION 02515

## SECTION 02735 – SEWER AND UTILITIES

### PART 1 – GENERAL

#### 1.1 RELATED DOCUMENTS:

A. The provisions of the Contract Documents apply to the work of this section.

#### 1.2 DESCRIPTION:

A. Standard construction details, specifications, and the construction standards of the City of Roanoke, Virginia and the Virginia Department of Transportation shall be followed unless specific deviation therefrom is authorized, in writing, by the Engineer, or unless specific deviation is shown on approved plans.

B. Construction of sewers and appurtenances shall be in accordance with plans and with specifications contained herein. Good workmanship and standard construction procedures shall be applied.

C. Shop drawing submittals for all materials specified in this section shall be provided to the Engineer in accordance with these specifications.

#### 1.3 SAFETY:

A. Except as thereafter provided, the current edition of Rules and Regulations Governing Construction, Demolition and Excavation as adopted by the Safety Codes Commission of the Commonwealth of Virginia, and all provisions therein contained are hereby included as a part of these Specifications. (A manual setting forth these rules and regulations have been issued by the Department of Labor and Industry and may be obtained by writing the office at P. O. Box 1814, Richmond, VA 23214).

B. Proper safety precautions shall be exercised in all phases of work. The Engineer shall require the use of any techniques or devices necessary to protect both workmen and the general public from injury or loss of life. It shall be the responsibility of the project foreman or superintendent to recognize and correct hazardous conditions whether or not he has received previous direction from the Architect.

C. The current provisions of Article II of the Rules and Regulations Governing Construction, Demolition, and All Excavation as adopted by the Safety Codes Commission, Commonwealth of Virginia shall apply, in their entirety, to all excavation work occurring in conjunction with the use of these specifications. The following supplemental specifications shall also apply to all excavation work.

D. Storage of Excavated Material: Excavated or other material shall not be stored nearer than two (2) feet from the edge of the excavation.

E. Sheeting and Bracing: The sides of an excavation five (5) feet or more in depth shall either be sloped to the angle of repose of the weakest stratum or be supported by sheeting, bracing, cribbing, shoring, or other safe support systems in accordance with such requirements as specified in Article II of the aforementioned Rules and Regulations. In solid rock, hard shale, or other types of stable materials, Contractor shall exercise appropriate safety measures in accordance with the aforementioned Rules and Regulations.

1. All materials used for sheeting, bracing, shoring or cribbing shall be in good serviceable condition. Timber shall be sound, free from large or loose knots and comparable in strength to straight grained southern yellow pine or similar timber of comparable strength. Where conditions are encountered which require materials of greater strength or dimensions than as specified in Article II, approval of such materials and their use must be received from the Architect.

F. Personal Protection: The provisions of Article VII of the aforementioned Rules and Regulations shall apply to insure the protection of workmen from hazards created by conditions to which workers are exposed. In addition to exercising all practical control to eliminate such hazards, or reduce them to a minimum, the Contractor shall also issue personal protection equipment, such as hard hats, and safety goggles where indicated by working conditions.

G. Explosives: The use of explosives is prohibited on this project.

H. Public Protection: The provisions of Article X of the Rules and Regulations Governing Construction, Demolition, and All Excavation shall apply to insure adequate and safe protection to the general public whenever construction work is readily accessible to the public.

## PART 2 – PRODUCTS

### 2.1. STORM SEWERS:

A. Storm Drainage Pipe Culverts, Jointing and Accessories: Unless otherwise approved in writing by the Civil Engineer, or if specifically indicated on plans having his approval, all pipe used for construction indicated on plans shall meet the current and appropriate specifications of the American Society for Testing Materials. The laying length shall not be less than three (3) feet.

B. Polyvinyl Chloride (PVC), SDR-35 storm drain pipe shall comply with ASTM Designation D 3034.

C. Standard Manholes, Catch Basins, and Appurtenances: All pre-cast storm sewer structures shall be in compliance with the current VDOT construction standards and specifications, except where special designed structures are used and so noted on the plans. Pre-cast concrete risers shall have mortar joints. All storm sewer structures shall have VDOT IS-1 inlet shaping.

D. PVC Roof Drain Lines: PVC lines shall be manufactured in accordance with ASTM Designation 3034-latest edition (SDR 35). Installation of PVC drain lines shall be in accordance with ASTM Designation 2321 and manufacturer's recommendation. Pipe stored for more than one (1) year prior to installation shall be covered with an opaque covering to prevent damage by the sun.

E. HDPE Pipe: High Density Polyethylene (HDPE) corrugated pipe with an integrally formed smooth interior shall be provided complete with all couplings, fittings, and adapters. Piping and fittings shall comply with AASHTO Type S (N12) designation and shall have a full circular cross section, with an outer corrugated pipe wall and a smooth inner wall. Pipe shall be as manufactured by Advanced Drainage Systems (ADS), or approved equivalent and installed per ASSHTO Section 30 or ASTM D 2321 and as recommended by manufacturer.

F. PVC Pipe: Polyvinyl Chloride (PVC) pipe shall be schedule 40 pipe shall be provided complete with all couplings, fittings and adapters as required as indicated on the drawings.

G. Clean Outs: Clean out piping shall be the same diameter and material as the main line.

## PART 3- EXECUTION

### 3.1 TRENCHING, BEDDING AND BACKFILLING:

A. The trench walls above the top of the pipe may be sloped or the trench above the top of the pipe may be widened as necessary for placing sheeting and bracing, as part of the contract price. It is desirable to keep all trench walls vertical, is possible, and before sloping the walls the Contractor shall obtain the Owner's Field Representative's permission to do so. Excavation in ditches and at manholes and similar structures shall be kept free of water at all times until the pipes have been laid, properly jointed and backfilled. No trench shall be opened until adequate pumping equipment is available to dewater the trench, should this be required.

B. Trenches for sewers and drains shall be excavated to the alignment and depths required to allow installation of pipes as shown on the plans. Grade the trench bottoms to provide a smooth, firm and stable foundation free from rock points throughout the length of the pipe. The elevations shown on the plan are the inside flow line of the pipe, and the trench shall be excavated so as to provide for the pipe and bedding thicknesses below these grades.

C. All PVC storm sewer pipe shall be bedded in compacted granular material. The granular material shall be crushed stone aggregate, VDOT Size No. 21A. The granular bedding shall have a minimum thickness of 6 inches under the pipe, and extend 1/2 the diameter of the pipe up the pipe barrel at the sides.

D. Where excavation is caused by the Contractor's error or wherever the excavation is carried beyond or below the lines and grade shown on the plans, the Contractor shall, at his own expense, refill all such excavated space with such approved material and in such a manner as may be directed by the Architect in order to insure the stability of various pipe lines or structures. Space excavated without authority shall be refilled with Class "B" (VDOT Specification Section 217) concrete or with crushed stone or other approved material as ordered and as directed at the Contractor's expense.

E. All trenches and excavations shall be properly sheeted and braced, where necessary for the safety of personnel or the protection of the work, or to maintain the maximum trench widths specified or to prevent the disturbance or settlement of adjacent foundations and structures, or as required by the local authorities. Where necessary, bracing shall be so arranged as not to place any stress on portions of the complete work until the general construction thereof has proceeded far enough to provide ample support. Loss of life; injury to personnel; or damage to new or existing structures, slides, caves or other causes due to failure or lack of sheeting or bracing, or improper bracing, shall be the Contractor's responsibility and shall be repaired at his own expense. No payment will be made for sheeting and bracing.

F. Backfill around and immediately over the pipe with select material free from stones and compact carefully and then balance of the backfill shall be with excavated material approved by the Owner's Soils Engineer. Material shall consist of earth, sandy clay, sand and gravel, soft shale or other approved materials and shall be free from frost and large clods of earth or stones larger than that specified on the drawings. The backfilling shall be deposited in six inch (6") loose layers and thoroughly and carefully tamped to required compaction rate at optimum moisture in both excavations for structures and pipe trenches. The layers shall be brought up evenly. All deficiency in the quantity of material for backfilling or for filling depressions caused by settlement shall be supplied and placed by the Contractor. The compaction for the backfilling shall be executed in such a manner that there will be no settlement or depression in the finished grade and in conformance with Section 02200 of these specifications. Should depressions appear, the area shall again be compacted until there is no further settlement, and brought to finished grade at no additional cost to the Owner.

G. If the excavated material is not suitable to use as "backfill", the Contractor shall provide material from off-site to use as backfill. This material shall be approved by the Owner's Soils Engineer prior to hauling onto site. This substitution shall be accomplished at no additional cost to the Owner.



### 3.2 INSTALLATION OF SEWER PIPES:

A. The pipe shall be bedded as hereinbefore specified, true to line and grade. Utilize laser technology when laying any sewer pipe at less than 1% slope to ensure true grade.

B. All gravity lines shall be laid from the structure with the lowest elevation uphill to the structure with the highest elevation. All pipe sewers shall be laid with bells upgrade. The section of the pipe shall be so laid and fitted together that the completed sewer will have a smooth and uniform invert. The pipe shall be kept thoroughly clean so that jointing materials will adhere. Each pipe shall be inspected for defects before being lowered into the trench. The interior of the pipe shall be clean at the time of laying and shall be kept clean as the work progresses.

C. Jointing – Rubber Gasket: The use of rubber gaskets when joining pipes will be permitted provided that installation is in strict accordance with manufacturer's specifications and the recommended lubricant is used. Rubber gaskets for concrete pipe joints shall meet requirements of ASTM C 443, "Joints for Circular Concrete and Culvert Pipe, Using Flexible, Watertight, Rubber Gaskets".

D. The end of pipes which enter structures shall be neatly cut to fit the inner face of the structure. After joints have been inspected and approved, pipes shall be back-filled as previously specified. Care shall be used so that pipes are not displaced in elevation or alignment during backfilling.

E. Testing: Perform testing of completed storm sewer lines in accordance with local authorities having jurisdiction.

### 3.3 INSTALLATION OF MANHOLES:

A. Where manholes occur in pavements, set tops of manhole frames and covers flush with finish surface. Elsewhere, set tops to elevations indicated on the drawings.

END OF SECTION 02735

## SECTION 02830 – FENCES

### PART 1 – GENERAL

#### 1.1 SCOPE

A. Description of Work: Provide all temporary and permanent fencing and gates indicated on the drawings, as specified herein, and as needed for a complete and proper installation.

#### 1.2 QUALITY ASSURANCE

A. Chain Link Fence Manufacturer's Institute

#### 1.3 SUBMITTALS

A. Technical information and details of construction showing gates, posts, bracing and other components.

### PART 2 – PRODUCTS

#### 2.1 FENCE TYPES

A. Fence shall be either black vinyl-coated fabric, posts, and rails, or standard galvanized fabric, posts, and rails, as shown on the drawings. Height shall be as specified on the drawings.

#### 2.2 MATERIALS

A. Material and accessories shall be supplied by one of the following manufacturers:

1. Anchor Fence, Baltimore, Maryland
2. Chain-Link Fence Company of Pennsylvania
3. Cyclone Fence by U. S. Steel
4. General Wire and Cable Company
5. National Fence Manufacturing Company

B. Chain Link Fabric: ASTM A-392, Class 1, commercial quality, medium high carbon, galvanized after weaving, steel wire fabric. Nine (9) gauge x one and three quarter (1 ¾) inch mesh, height as indicated. Provide black vinyl coated fabric as required by the drawings.

1. Polyvinyl Chloride (PVC) finish shall comply with ASTM F 668, with core wire diameter (gage) measured prior to application of PVC coating with not less than 0.40 oz. zinc per square foot of uncoated surface on 9 and 11 gage wire.

a. Class 2, minimum 0.006 inch, maximum 0.025 inch thick PVC coating fuse bonded and adhered to a cured primer applied over zinc coated steel core wire.

b. Class 2a, 0.015 to 0.025 inch thick PVC coating extruded and adhered to zinc coated steel wire.

C. Posts: ASTM A-120, schedule 40 or structural grade pipe, spaced not further than eight feet (8') apart, hot dip galvanized inside and out, all posts to have tops. Provide black vinyl coated material as required by the drawings.

D. Line Posts: Standard 3.000 inch O.D. 7.58 pounds per foot, steel pipe. Maximum spacing eight feet (8'). Provide black vinyl coated material as required by the drawings.

A. Corner, Terminal and Gate Posts: Standard 4.000 inch O.D. 9.11 pounds per foot, steel pipe. Provide black vinyl coated material as required by the drawings.

B. Gate Posts: Type 1, 4.00 inch O.D. 9.11 pounds per foot. Extend 4'0" into the ground. Provide black vinyl coated material as required by the drawings.

C. End, Corner and Gate Posts: Shall be braced to the adjacent line posts with a 1.660 inch O.D. SS-20 pipe weighing 2.27 pounds per linear foot and a 3/8" adjustable truss rod with turnbuckle tightener. Provide black vinyl coated material as required by the drawings.

D. Top Rail and Bracing : ASTM A-120, schedule 40 or structural grade pipe, 1.660 inch O.D. 2.27 pounds per foot. Hot dip galvanized inside and out. Top rail of twenty-one (21) foot lengths joined by six inch (6") long sleeves, to run continuously along top of fence. Provide black vinyl coated material as required by the drawings.

E. Gate Frames: Shall be tubular steel of sufficient size and weight to support the gate structure. Size and weights to comply with minimum requirements and standards of the Chain Link Fence Manufacturer's Institute. Frames shall be joined at the corners by arc welding to form a rigid one piece panel and filled with the same fabric used as fencing. Where welded, paint with liquid galvanized compound. Provide black vinyl coated material as required by the drawings.

F. Personnel and Vehicle Gates: Swing types with perimeter frame; operating hardware to include forked type latch with padlock eye, and non-lift-off hinges to allow 180 degree operation. Provide black vinyl coated material as required by the drawings.

### 3.1 INSTALLATION

- A. Install fencing to heights shown on drawings.
- B. Verticals installed plumb in concrete foundations of sufficient size and depth to sustain them vertically when tension is applied.
- C. Chain link fabric shall be stretched to proper tension between terminal posts and securely fastened to the frame work members.
- D. Install fabric so that fence barbs extend 1.5" above top rail.
- E. Fabric connections, attachment to terminal posts with tension bars and tension bands, spaced fifteen inches (15") maximum. Fabric to be attached to line posts, top rail with nine (9) gauge zinc coated wire clips twelve inches (12") on centers.
- F. Gates shall be size and type shown on drawings, complete with all latches, stops, keepers and hinges.
- G. Gates shall be the same height as fence in which they are installed.
- H. Set line corner, terminal and gate post approximately 4'-0" below finish grade by driving them into soil. Any posts that are not sufficiently stable shall be set in concrete.

END OF SECTION 02830

## SECTION 02831 – TENNIS COURT SURFACING

### PART 1 – GENERAL

#### 1.1 SECTION INCLUDES:

- A. Asphalt tennis court surface color coating system.
- B. Related Requirements:
  - 1. Section 02513 – Bituminous Paving.

#### 1.2 REFERENCE STANDARDS:

- A. American Sports Builders Association (ASBA).
- B. United States Tennis Association (USTA) RULES OF TENNIS.

#### 1.3 ACTION SUBMITTALS:

- A. Product Data: Submit manufacturer's product data, including surface and crack preparation and application instructions.
- B. Samples: Submit manufacturer's color samples of color coating.

#### 1.4 INFORMATIONAL SUBMITTALS:

- A. Manufacturer's Certification: Submit manufacturer's certification that materials comply with specified requirements and are suitable for intended application.
- B. Manufacturer's Project References: Submit manufacturer's list of successfully completed asphalt tennis court surface color coating system projects, including project name, location, and date of application.
- C. Applicator's Project References: Submit applicator's list of successfully completed asphalt tennis court surface color coating system projects, including project name, location, type and quantity of color coating system applied, and date of application.
- D. Warranty Documentation: Submit manufacturer's standard warranty.

## 1.5 QUALITY ASSURANCE:

### A. Manufacturer's Qualifications:

1. Manufacturer regularly engaged, for past 5 years, in manufacture of asphalt tennis court surface color coating systems of similar type to that specified.

### B. Applicator's Qualifications:

1. Applicator regularly engaged, for past 3 years, in application of tennis court surface color coating systems of similar type to that specified.

2. Employ persons trained for application of tennis court surface color coating systems.

## 1.6 DELIVERY, STORAGE AND HANDLING:

A. Delivery and Acceptance Requirements: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.

### B. Storage and Handling Requirements:

1. Store and handle materials in accordance with manufacturer's instructions.

2. Keep materials in manufacturer's original, unopened containers and packaging until application.

3. Store materials in clean, dry area indoors.

4. Store materials out of direct sunlight.

5. Keep materials from freezing.

6. Protect materials during storage, handling, and application to prevent contamination or damage.

7. Close containers when not in use.

## 1.7 AMBIENT CONDITIONS:

- A. Do not apply asphalt tennis court surface color coating system when air or surface temperatures are below 50 degrees F during application or within 24 hours after application.
- B. Do not apply asphalt tennis court surface color coating system when rain is expected during application or within 24 hours after application.

## PART 2 – PRODUCTS

### 2.1 MANUFACTURER:

- A. SportMaster Sport Surfaces, PO Box 2277, 2520 South Campbell Street, Sandusky, Ohio 44870. Website [www.sportmaster.net](http://www.sportmaster.net). E-Mail [info@sportmaster.net](mailto:info@sportmaster.net).
- B. The SportMaster system is specified to establish a standard of quality. Products by Dynaflex, Plexipave, SealMaster and NovaSport may be used. No other/substitute products will be accepted.
- C. Submit detailed specifications and installation instruction for any system to the owner for review prior to ordering of material or installation.

### 2.2 MATERIALS:

- A. Asphalt Tennis Court Surface Color Coating System: SportMaster Color Coating System.
- B. Patch Binder: SportMaster “Acrylic Patch Binder”.
  - 1. 100 percent acrylic emulsion liquid binder.
  - 2. Mix on-site with sand and cement.
  - 3. Levels and repairs low spots and depressions up to  $\frac{3}{4}$  inch deep in asphalt pavement.
  - 4. Fills Cracks in Asphalt up to 1” in width.
  - 5. Weight per Gallon at 77 Degrees F: 8.8 lbs., plus or minus 0.5 lbs.
- C. Filler Course: SportMaster “Acrylic Resurfacer”.

1. 100 percent acrylic emulsion resurfacer.
2. Mix on-site with silica sand.
3. Apply to asphalt surfaces or previously colored acrylic surfaces in preparation of color coating system.
4. Chemical Characteristics, by Weight, Minimum:
  - a. Acrylic Emulsion: 44.0 percent.
  - b. Hiding Pigment: 2.0 percent.
  - c. Mineral Inert Fillers: 5.0 percent.
  - d. Film Formers, Additives: 0.2 percent.
  - e. Water: 45.0 percent.
5. Weight per Gallon at 77 Degrees F: 8.5 lbs., plus or minus 0.5 lbs.
6. Non-Volatile Material: 27.5 percent, plus or minus 5.0 percent.
7. Color: Neutral
- D. Color Coating: SportMaster "ColorPlus System":
  1. 100 percent acrylic emulsion coating.
  2. Mix on-site with silica sand and water.
  3. Color coats tennis and multipurpose courts.
  4. Weight per Gallon at 77 Degrees F: 9.2 lbs., plus or minus 0.5 lbs.
  5. Colors: As selected from manufacturer's standard color line.
    - a. Base Course and out of play areas shall be blue.
    - b. Play Court shall be green.
    - c. All lines shall be high visibility white.
- E. Line Markings Primer: SportMaster "Stipe-Rite".
  1. 100 Percent acrylic emulsion primer, clear drying.
  2. Primes line markings and prevents bleed-under for sharp lines.
  3. Chemical Characteristics, by Weight, Nominal:
    - a. Acrylic Emulsion: 38.0 percent.



- b. Hiding Pigment: 0.0 percent.
  - c. Mineral Inert Fillers: 7.0 percent.
  - d. Film Formers, Additives: 1.5 percent.
  - e. Water: 50.0 percent.
- 4. Weight per Gallon at 77 Degrees F: 8.9 lbs., plus or minus 0.5 lbs.
  - 5. Non-Volatile Material: 29 percent, plus or minus 5 percent.
- F. Line Paint: SportMaster "Textured Line Paint".
- 1. Pigmented, 100 percent acrylic emulsion line paint.
  - 2. Line marking on asphalt tennis courts.
  - 3. Chemical Characteristics, by Weight, Nominal:
    - a. Acrylic Emulsion: 25.89 percent.
    - b. Pigment: 14.90 percent.
    - c. Mineral Inert Fillers: 13.12 percent.
    - d. Additives: 4.73 percent.
    - e. Water: 41.36 percent.
  - 4. Weight per Gallon at 77 Degrees F: 10.65 lbs., plus or minus 0.75 lbs.
  - 5. Non-Volatile Material: 45.17 percent, plus or minus 5 percent.
  - 6. Color: As selected.

## PART 3 – EXECUTION

### 3.1 EXAMINATION:

- A. Schedule a pre-installation conference with owner and engineer a minimum of two (2) weeks prior to beginning work.
- B.
- C. Examine asphalt tennis court surfaces to receive color coating system.
- D. Verify asphalt tennis courts meet USTA requirements.
- E. Notify Engineer of conditions that would adversely affect application or subsequent use.

F. Flood area to receive surface. Inspect after one hour at 70°F or greater for any ponding that is greater than one sixteenth of an inch (1/16") in depth. Fill ponded areas greater than 1/16" with approved filler and retest by flooding.

G. Do not begin surface preparation or application until unacceptable conditions are corrected.

### 3.2 SURFACE PREPARATION:

A. Protection of In-Place Conditions: Protect adjacent surfaces and landscaping from contact with asphalt tennis court surface color coating system.

B. Prepare surfaces in accordance with manufacturer's instructions.

C. Cure new asphalt surfaces a minimum of 14 to 30 days before application of asphalt tennis court surface color coating system.

D. Remove dirt, dust, debris, oil, grease, vegetation, loose materials, and other surface contaminants which could adversely affect application of asphalt tennis court surface color coating system. Pressure wash entire surface.

E. Repair cracks, depressions, and surface defects in accordance with manufacturer's instructions before application of filler course and color coating.

END OF SECTION 02831

## SECTION 02900 – TOPSOILING AND SEEDING

### PART 1 – GENERAL

#### 1.1 RELATED DOCUMENTS:

- A. The provisions of the Contract Documents apply to the work of this section.

#### 1.2 GENERAL REQUIREMENTS:

- A. The work consists of providing topsoiling and seeding of the required areas.

#### 1.3 QUALITY ASSURANCE:

- A. Preparation, spreading and fine grading of topsoil, installation of grassed areas, and related work shall be performed by a firm with a minimum of five years experience specializing in these types of work.
- B. Applicable specifications and standards – Commonwealth of Virginia Agricultural Standards for State “Certified” seed and sod.
- C. Final payment for the work under this section will be made only after the Owner’s acceptance of the seeded areas.

### PART 2 – PRODUCTS:

#### 2.1 TOPSOIL:

- A. Topsoil shall be a natural, fertile, friable soil, typical of productive soils in the vicinity, obtained from naturally well drained areas, neither excessively acid nor alkaline, and containing no substance harmful to grass growth. Acceptable topsoil shall contain organic matter in the range of 2.0% to 4.0%.
- B. Topsoil from onsite and offsite sources shall be machine-pulverized with a topsoil shredder prior to spreading. Topsoil shall be free of all roots and stones larger than 1” in any dimension and any other debris. Topsoil shall be provided at a minimum depth of six (6) inches.

## 2.2 SEED:

A. Grass seed shall be Certified Blue Tag, fresh, clean, new crop seed composed of the following varieties mixed in the proportions shown and tested to the following minimum percentages of purity and germination. Weed seeds and insect matter shall not exceed 0.25% by total weight. All components shall be free of noxious weeds.

B. The seed mixture for areas to receive temporary seeding shall be comprised of 50% Annual Rye Grass and 50% Winter Rye applied at a rate of 120 lbs. per acre.

C. All areas shall be permanently seeded with the following mixture at a rate of 300 lbs/acre: 100% "Rescue Blend" by Landscape Supply.

## 2.1 FERTILIZER:

A. The lime material shall be ground limestone which contains at least 50% total oxides (calcium oxide plus magnesium oxide). Ground limestone shall be ground to such fineness that at least 50% will pass through a 100 mesh sieve and 98 to 100% will pass through a 20 mesh sieve.

B. All fertilizers shall be uniform in composition, free flowing, and suitable for application with approved equipment. Fertilizers shall be delivered to the site fully labeled according to applicable State Fertilizer laws and shall bear the name, trade name, or trademark and warranty of the producer.

## PART 3 - EXECUTION

### 3.1 TOPSOILING:

G. After the areas to be topsoiled have been brought to subgrade, and immediately prior to dumping and spreading the topsoil, the subgrade shall be loosened by scarifying and disking to a depth of at least 4 inches to permit bonding of the topsoil to the subsoil.

H. All stockpiled topsoil shall be spread on the areas to be seeded. It is recommended that the Contractor visit the Site prior to Bidding to test core to determine to his own satisfaction how much topsoil if any, will be needed from off-site sources to provide the 6-inch minimum required. Topsoil shall be free of subsoil, clay, brush, weeds, stones larger than 1" diameter, roots, or other debris. Fine grading shall be to such tolerances that will allow the cutting of the lawn areas by normal tractor-drawn mowing equipment without damage to the turf and without ponding or holding water. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets. Topsoil shall not be placed while in a frozen or muddy condition, when the subgrade is excessively wet, or in a condition that may otherwise be detrimental to proper grading or seeding.

I. After the topsoil has been spread and the final grades approved, it shall be cleared of all grade stakes, surface trash, and other objects that would hinder maintenance of seeded areas. The Contractor shall machine rake or hand rake in small confined area, all areas to be seeded or sodded to provide a seed bed ready for liming, fertilizing, and seeding and sodding.

### 3.2 LIME AND FERTILIZER:

A. Prior to planting seed, the areas shall be brought to proper finished grades and previously graded areas shall be repaired as necessary. Spread over the entire area ground lime at the rate of two tons per acre. Commercial fertilizer 10-10-10 shall be uniformly spread over the entire area using an approved seed drill, at a rate of 1000 lbs. per acre. work fertilizer and lime into soil to depth of 3 inches by disking, harrowing, or other approved methods.

B. After application of fertilizer, any irregularities shall be leveled out by raking.

### 3.3 SEEDING:

A. Areas to be seeded shall include the entire area of construction operations under this Project and as indicated on grading plans, excluding areas to be paved, occupied by structures or excluded from seeding on the plans. In addition, all other areas in which the existing turf has been disturbed by the Contractor's operations shall be seeded. Prepare topsoil in accordance with this section.

B. Seeding shall be done between March 15 and May 15 & September 1 and October 15.

C. After application of fertilizer, any irregularities shall be leveled out by raking. Seed shall be then uniformly sown, using drillers or seeders. After sowing, seed shall be lightly covered by means of a brush harrow or a spike tooth harrow and then compacted rolling. Mulch immediately with straw mulch at the rate of 2,000 lbs. per acre.

D. Seeding of banks, swales and any areas that will receive no further construction traffic shall be seeded as specified during the first allowable seeding period following rough grading, to minimize the washing of earth surfaces and consequent silting to the watershed. Silt dams may be required if silting becomes a problem.

E. At the Contractor's option, seed, mulch and 10% of fertilizer may be applied by a hydra-seeding method. All lime and 90% of fertilizer shall be applied as hereinbefore specified. A letter stating the mix proportions, rate of application, application procedure to be followed, and previous qualifications of applier shall be sent to the Architect for approval prior to doing the work.

F. Prior to any payment being made for seeding work, the Contractor shall submit a seed analysis test report of the seed placed on the Project. In addition to these reports, he shall also submit a copy of the Vendor's Invoice which shall show the amount of lime, fertilizer, and seed shipped to this Project. A statement written on either the Subcontractor's or General Contractor's letterhead stating the amount of material placed on this job, signed by both parties, shall accompany the Vendor's Invoice.

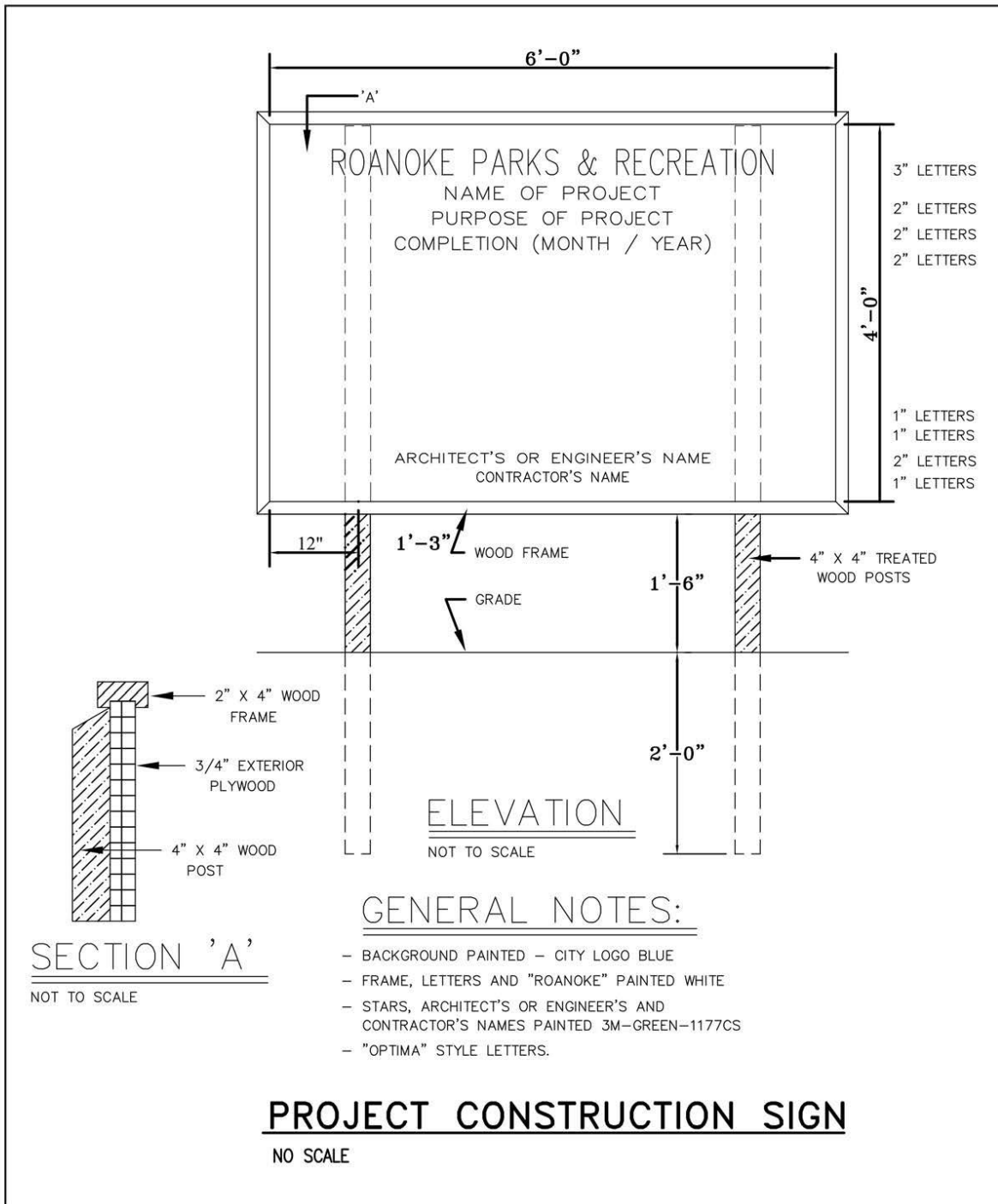
G. The seeded areas shall be maintained until project close-out. Maintenance shall consist of providing protection against traffic, re-seeding, weeding, re-fertilizing, watering, and mowing as necessary to produce a completely established lawn. The Contractor shall do such replanting as required to establish a uniform stand of grass. At the beginning of the next planting season after that in which the permanent crop is sown, the seeded areas will be inspected. Any section not showing vigorous growth at that time shall be promptly reseeded by the contractor at his own expense. The work under this area will be accepted and final payment made only after a uniform stand of grass has been established, regardless of final completion date.

END OF SECTION 02900

APPENDIX A  
TO  
ITB#16-02-05

PROJECT CONSTRUCTION SIGN

1 Page



COMM. NO. 14043	ROANOKE CITY PARK IMPROVEMENTS <b>PROJECT SIGN DETAIL</b>	DRAWN BY: MF	<b>XC501A</b> DRAWING NO.
DATE: 5/13/15	SCALE: NO SCALE REF. NO.: C501	CHECKED BY: MAR	



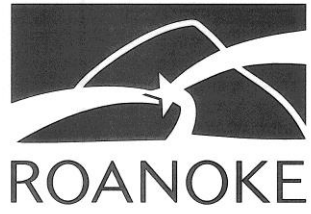
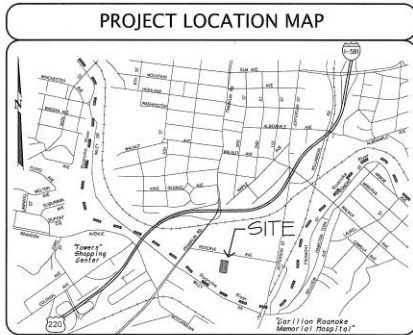
**TENNIS COURTS RIVERS EDGE PARK- NORTH  
ROANOKE, VIRGINIA**

**Invitation to Bid No. 16-02-05A**

**DRAWINGS**

**12 PAGES**





OFFICE OF THE PARKS AND GREENWAY PLANNER  
215 CHURCH AVENUE, SW  
ROOM 301  
ROANOKE, VIRGINIA 24011-1587  
PHONE: (540) 853-1166  
FAX: (540) 853-1287

## INDEX OF SHEETS

SHEET #	TITLE
C-1	CIVIL TITLE SHEET
C-2	DIMENSIONAL PLAN
C-3	GRADING & UTILITY PLAN
C-4	EROSION & SEDIMENT CONTROL PLAN
C-5	VIRGINIA E.S.C. REGULATIONS
C-6	GENERAL PERMIT NO. VARIO - SUPPLEMENTAL INFORMATION
C-7	POLLUTION PREVENTION PLAN
C-8	VIRGINIA E.S.C. DETAILS
C-9	LANDSCAPE PLAN
C-10	CIVIL DETAILS
C-11	CIVIL DETAILS & NOTES
C-12	BIORETENTION FILTER DETAILS

## LEGEND

ABBREVIATIONS	SYMBOLS
ARW ARROW HEAD TOP OF	EXISTING
APPR APPROXIMATE	NEW
APRN ASPHALT	FOOT
BC BOTTOM OF CURB	SPOT ELEVATION
BT BOTTOM OF TIE	CONTOUR
BUS BUILDING	SEWER
BL BLOCK	WATERLINE
BR BRIDGE	STORM DRAIN
BS BOTTOM OF WALL	GAZ LINE
CB CURB & GUTTER	OVERHEAD ELECTRIC LINE
COR CORRUGATED METAL PIPE	OVERHEAD TELEPHONE LINE
COR CONCRETE	OVERHEAD CABLE TELEVISION LINE
CO CORNER	UNDERGROUND TEL OR ELCT LINE
CR DROP INLET	WATER OR GAS METER
DA DIAMETER	VALVE
ED EDGE OF GRAVEL	FIRE HYDRANT
EF EDGE OF PAVEMENT	MANHOLE
ELE ELECTRIC	CLEARDIRT
ELEV ELEVATION	DROP INLET (CURB OR GRATE)
ENT ENTRANCE	UTILITY POLE, JOINT & ANCHOR
EW ENDWALL	SITCH OR SINK
EX EXISTING	CENTERLINE OR BASELINE
FF FINISHED FLOOR	PROPERTY LINE
FG FINISH GRADE	SURVEY MARKER POINT
IN INSET	DIRECT ANGLE
INT INTERSECTION	YARD LIGHTING
IP IRON PIN	YARD HYDRANT
LT LEFT	FENCE
MA MANHOLE	
MAN MANHOLE	
PROF PROPOSED	
PUE PUBLIC UTILITY EXISTENT	
PAV PAVEMENT	
RT RIGHT	
RI REQUIRED	
RO RIGHT OF WAY	
SD STORM DRAIN	
SDM STORM DRAIN MANHOLE	
SS SANITARY SEWER	
SSM SANITARY SEWER MANHOLE	
STA STATION	
STR STORM DRAIN	
TC TOP OF CURB	
TEL TELEPHONE	
TY TOP OF WALL	
TYM TYPICAL	
VESE VIRGINIA EROSION & SEDIMENT CONTROL HANDSIGN	
VOOT VIRGINIA DEPARTMENT OF TRANSPORTATION	
VERT VERTICAL	
VO VERTICAL	

## PROJECT NAME

# TENNIS COURTS RIVERS EDGE PARK-NORTH

TAXMAP #1040202  
RESERVE AVENUE  
ROANOKE, VA 24016

PLAN NUMBER: \_\_\_\_\_

CITY PLANNING NUMBER: \_\_\_\_\_ CP140064

## APPROVED FOR CONSTRUCTION

<i>[Signature]</i> PARKS AND GREENWAY PLANNER	12/1/15 DATE
<i>[Signature]</i> DIRECTOR OF PARKS AND RECREATION	12/1/15 DATE
<i>[Signature]</i> ASSISTANT CITY MANAGER	12/1/15 DATE

## CONSTRUCTION PROCEDURE REQUIREMENTS

NOTICE: ALL LANDOWNERS, DEVELOPERS AND CONTRACTORS  
FALLING TO COMPLY WITH THE CONSTRUCTION PROCEDURE REQUIREMENTS LISTED BELOW MAY RESULT IN THE COSTLY REMOVAL OF STRUCTURES, THE ISSUANCE OF A STOP WORK ORDER.  
1. RIGHT-OF-WAY EXCAVATION PERMIT --PRIOR TO THE COMMENCEMENT OF ANY DIGGING, ALTERATION OR CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY (STREETS, ALLEYS, PUBLIC RIGHT-OF-WAY), A RIGHT-OF-WAY EXCAVATION PERMIT SHALL BE OBTAINED BY THE CONTRACTOR FROM THE CITY OF ROANOKE.  
2. LAND REDEMPTION FEE --AN APPROVED EROSION AND SEDIMENT CONTROL PLAN FOR ANY EROSION/FILL AREAS ASSOCIATED WITH THE PROJECT MUST BE SUBMITTED PRIOR TO THE ISSUANCE OF A LAND DISTURBANCE PERMIT.  
3. PLANS AND PERMITS --A COPY OF THE PLANS AS APPROVED BY THE CITY (OWNED BY THE PROPER CITY OFFICIALS) AND ALL PERMITS ISSUED BY THE CITY SHALL BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES OF CONSTRUCTION.  
4. LOCATION OF UTILITIES --THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.  
5. CONSTRUCTION ENTRANCE --THE CONTRACTOR SHALL INSTALL AN ADEQUATE CONSTRUCTION ENTRANCE FOR ALL CONSTRUCTION RELATED TRAFFIC FROM THE SITE. THE WIDTH OF CONSTRUCTION ENTRANCE SHALL BE AS SHOWN ON THE PLANS.  
6. STREET TO BE OPEN TO TRAFFIC --IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN THE PUBLIC STREET ADJACENT TO THE CONSTRUCTION ENTRANCE REMAINS FREE OF MUD, DIRT, DUST, AND/OR ANY TYPE OF CONSTRUCTION MATERIALS OR LITTER AT ALL TIMES.  
7. BARRICADES/STREETS --THE CONTRACTOR SHALL MAINTAIN THE INTEGRITY OF ALL EXCAVATED STREETS AND SHALL FURNISH AND ENSURE THAT ALL BARRICADES PROPER AND NECESSARY FOR THE SAFETY OF THE PUBLIC ARE IN PLACE.  
8. SEWER AND WASTEWATER REPLACEMENT --CONSTRUCTION OF SANITARY SEWERS AND THE REPLACEMENT OF SANITARY SEWERS SHALL BE IN ACCORDANCE WITH APPROVED STANDARDS AND SPECIFICATIONS OF THE CITY OF ROANOKE AND THE WESTERN VIRGINIA WATER AUTHORITY.  
9. APPROVED PLANS/CONSTRUCTION CHANGES --ANY CHANGE OR VARIATION FROM CONSTRUCTION DESIGN AS SHOWN ON THE OFFICIALLY APPROVED PLANS SHALL BE APPROVED BY THE DESIGN AND SEWAGEMENT CONTROL BOARD PRIOR TO ANY CHANGES OR VARIATIONS IN CONSTRUCTION DESIGN.  
10. FINAL ACCEPTANCE/CITY --THE OWNER OR DEVELOPER SHALL FURNISH THE CITY OF ROANOKE'S PLANNING BOARD WITH A COMPLETED EROSION AND SEDIMENT CONTROL PLAN, CORRECT SET OF ALL-BUILT PLANS OF THE NEWLY CONSTRUCTED STORM DRAIN AND/OR WASTEWATER MANAGEMENT FACILITIES PRIOR TO FINAL ACCEPTANCE AND ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE CITY. ALL-BUILT PLANS SHALL BE PROVIDED IN THE STATE PLANS VIRGINIA SOUTH COORDINATE SYSTEM, HAD 1983, FIPS 4602 FEET, US SURVEY FEET, DATUM NAD 83, IN THE FORM OF 11x17 COPY AND 11x17x1/8" THICK FILE.

## CONSULTING ENGINEERS

**CWA**  
**CALDWELL WHITE ASSOCIATES**  
ENGINEERS / SURVEYORS / PLANNERS  
4003 MELROSE AVENUE, N.W.  
P.O. BOX 8280  
ROANOKE, VIRGINIA 24017  
(540) 368-3400  
EMAIL: CWA@ROANOKEVA.COM

Designed By: J.V. July

Checked By: F.B. Caldwell

Revised: 11/16/15

W.O. # 14-0001

N.B. # \_\_\_\_\_

REV. CITY #10

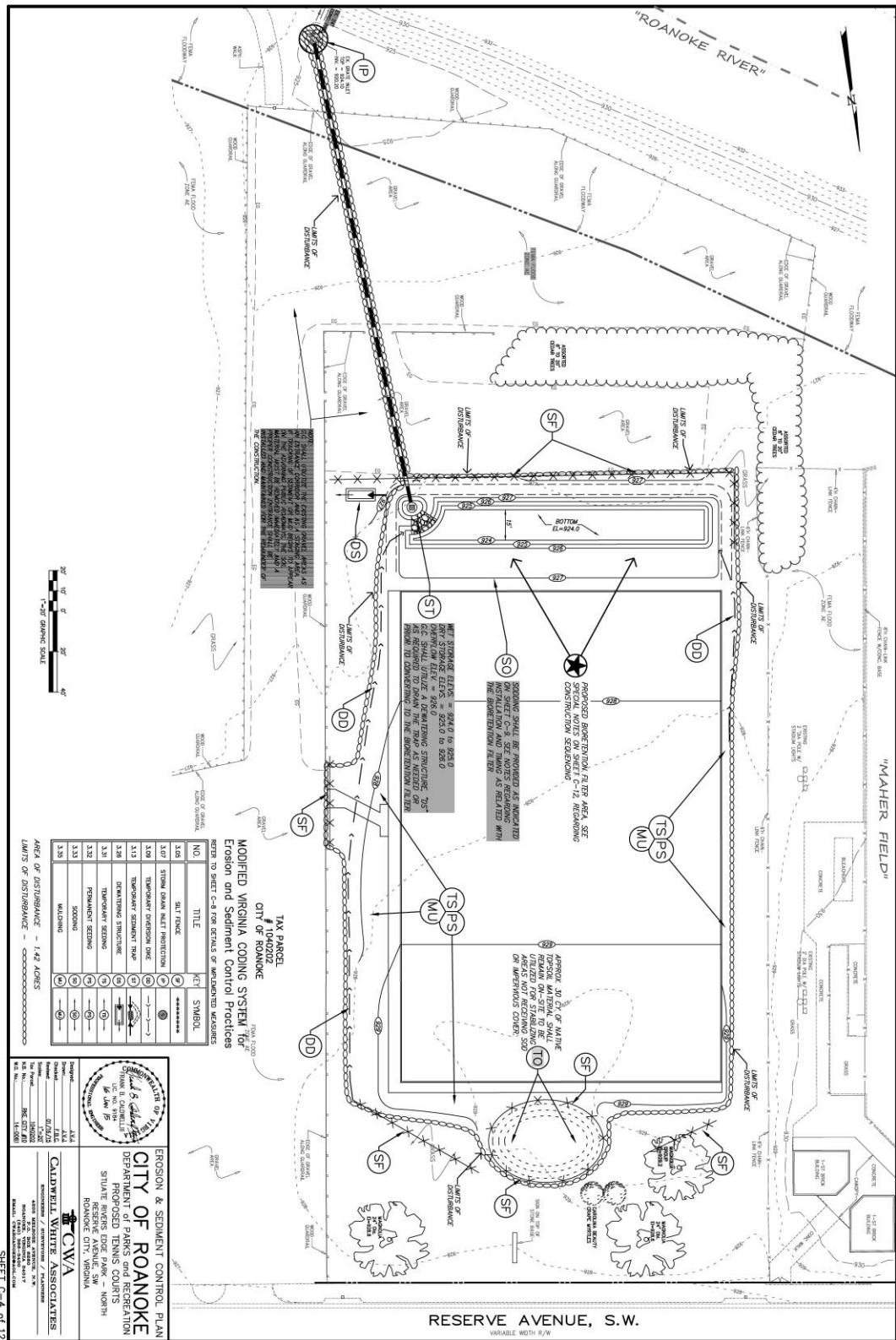


SHEET  
**C-1**

TENNIS COURTS - RIVERS EDGE PARK-NORTH







CONTRIBUTOR	TECHNIQUE OR METHOD	PROBLEMS
A. WINHAM AND MAY	REQUIRE ADDITIONAL MEASURES AS DEMAND NECESSARY BY THE LOCAL VIBRATION EXPOSURE & ECONOMIC CONTROL PROGRAM AUTHORITY ON THE COMPLETING ENGINEER.	

[illegible]

(AS TAKEN FROM TABLE 6-1 OF THE WINDROW EROSION AND SEDIMENT CONTROL HANDBOOK)

ES-1

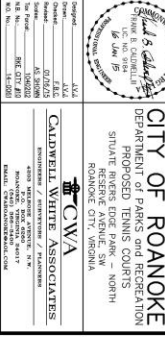
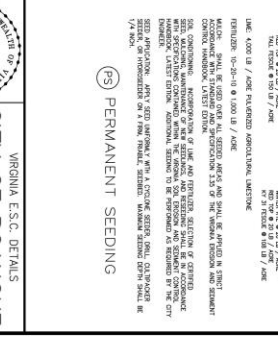
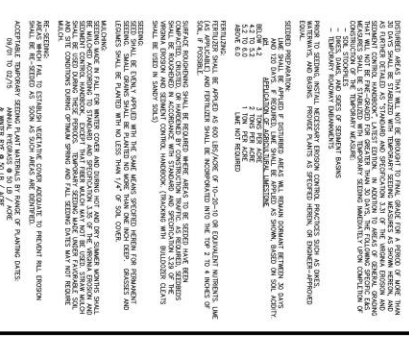
UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL, EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE COTTON RESEARCH STATIONS, AND A BORDENTON FILTER AREA. THE PROJECT WILL ALSO RECOVER THE INSTALLATION OF A STORM DRAIN SYSTEM TO BE INTO THE EXISTING ONE. LATER, THE ROAD ROTATION TRAILING WILL

[illegible]









**BIORETENTION:**  
PER REQUIREMENTS OF THE PROPOSED LANDSCAPE TREATMENT FOR A BIORETENTION FILTER, ONE (1) TREE SHALL BE PROVIDED FOR EACH 250 OF SURFACE AREA OF MEDIA.  
DESIGNED SURFACE AREA = 2075 SF.  
TREES REQUIRED = 2075 / 250 = 8  
TREES PROVIDED = 12

THE FOLLOWING ARE ACCEPTED BY THE VIRGINIA REG AND WILL CONTRIBUTE TO THE LANDSCAPE CANOPY REQUIREMENTS STATED BEFORE:

THE FOLLOWING SMALL SEEDS, BEETS AND ANEMONE.	
COMMON NAME	BOTANICAL NAME
SNOWDROP	
ANEMONE	
BEET	

**CITY CANOPY:**  
THE APPLICABLE REQUIREMENTS SET FORTH BY SEC. 36-2-641 OF THE CODE OF THE CITY STATES THAT THE REQUIREMENTS OF THIS DIVISION SHALL ONLY APPLY TO THOSE PORTIONS OF THE SITE THAT ARE AFFECTED BY THE PROPOSED IMPROVEMENTS.

THE PROJECT AREA = 1.42 ACRES OR 61,956 S.F.

FOR NEAR DISTRICTS, A 10% TREE CANOPY IS REQUIRED.  
10% OF 61,956 S.F. = 6,196 S.F. OR 141 TREES

TABLE 646-1 of the CODE OF THE CITY. A PROPOSED TREE LIST SHALL BE SUBMITTED TO THE DIRECTOR OF PLANS AND RECREATION, MR. DONNE UNDERWOOD, PRIOR TO PURCHASING AND PLANTING.

A 50-50 MIXTURE OF SMALL DECIDUOUS TREES AND LARGE DECIDUOUS TREES SHALL BE PROVIDED, EXCLUSIVE OF THE BROOKLETON PREL.

SYMBOL



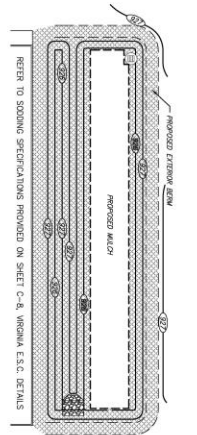
REPRESENTS A LARGE DECIDUOUS TREE. MR. CAMPBELL = 214.35'

(3)

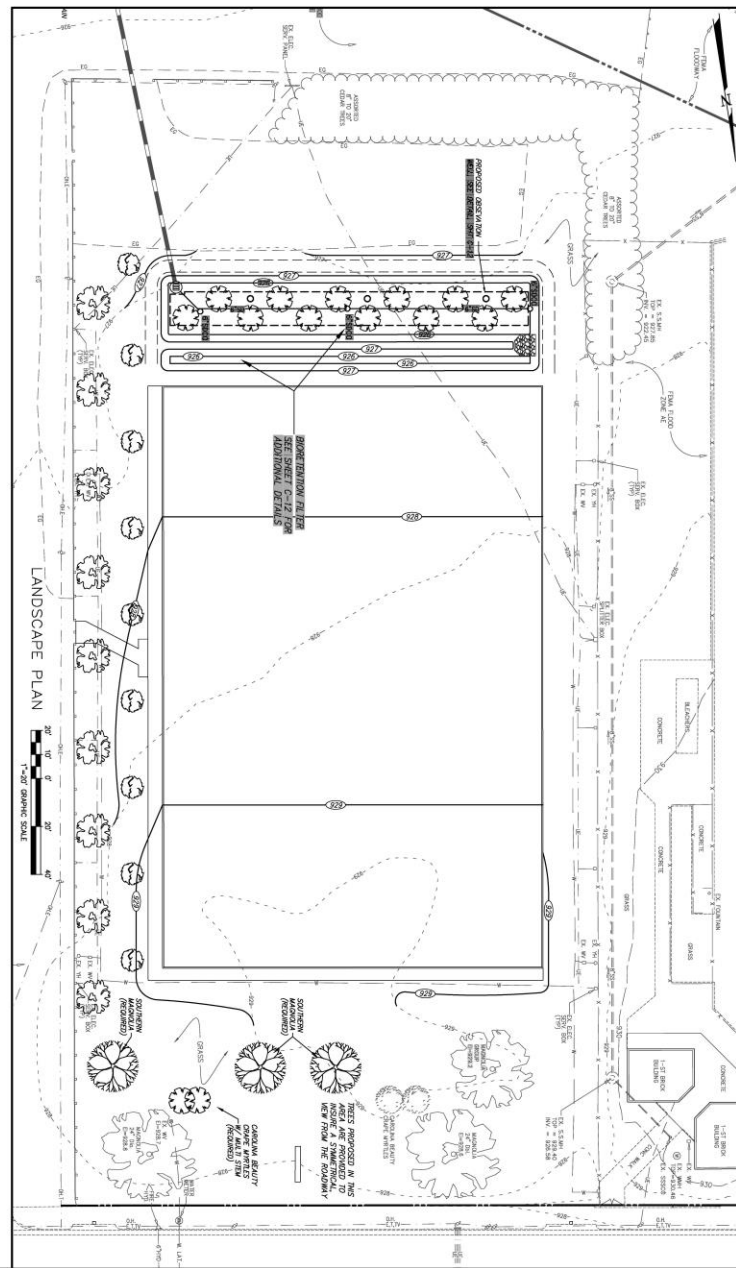
REPRESENTS A SMALL DECIDUOUS

TREES, AND CANOPY = 177 SF


CANOPY PLANTED	4 TREES	201 SF	804 SF
SERVOLEAF	1 TREES	5	708 SF
REDWOOD	3 TREES	177 SF	532 SF
WALNUT	1 TREES	5	532 SF
SHADUAM	3 TREES	113 SF	226 SF
COATE WHITE	2 TREES	X	
SHAL DECID.	9 TREES	X	1903 SF
LANE DECID.	9 TREES	X	
		824 SF	2268 SF
		TOTAL =	6600 SF

[illegible][illegible]

THE PLANTING OF TREES SHALL BE DONE IN ACCORDANCE WITH OTHER THE STANDARDIZED SPECIFICATIONS OF THE AMERICAN ASSOCIATION OF NURSERMEN.



Project:	JAL
Client:	JAL
Contract:	67-1-86
Site:	200000
Use:	IND. CTR.
City:	14-0000
State:	
Dist. No.:	




## CITY OF ROANOKE

### DEPARTMENT OF PARKS AND RECREATION

### PROPOSED TENNIS COURTS

STATE RIVERS EDGE PARK - NORTH  
ROANOKE, VIRGINIA



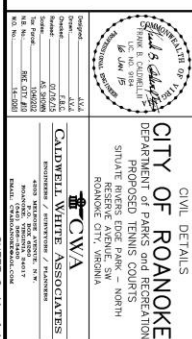
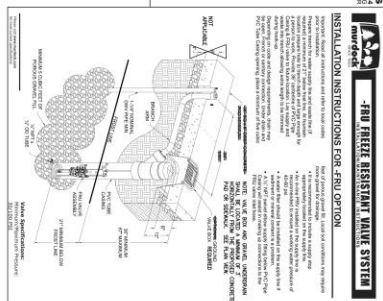
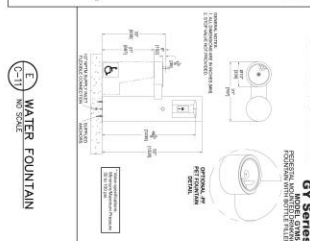
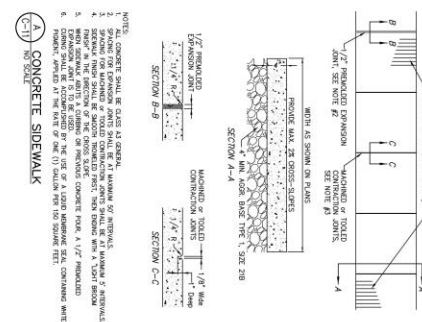
## CWA

### CADWELL WHITE ASSOCIATES

ARCHITECTS / ENGINEERS / PLANNERS

1000 E. MAIN AVENUE, SUITE 100  
ROANOKE, VIRGINIA 24002  
TEL: (703) 982-8800





### BIORETENTION SOIL MEDIA REQUIREMENTS:

[illegible]

## VEL 2

TYPED REQUIRED, OR RECALCULATED =  
 TAP REQUIRED = 1.128 (3" TP REMOVAL RATE REQD. = 1.68 lb/y  
 SURFACE AREA REQUIRED = 1.895 sq'. DESIGNED AREA PROVIDED = 2.075  
 DRAINAGE AREA TREATED = 1.06 ACRES. TP REMOVAL RATE = 1.76 lb/y  
 DESIGNED PONDING DEPTH = 6"  
 DESIGNED FILTER MEDIA DEPTH = 36"

REFER TO SOIL MEDIA REQUIREMENTS THIS SHEET

## 15

